Université de Montréal

Le rôle de l'attachement amoureux dans l'ajustement et le traitement des femmes souffrant de douleur génito-pelvienne : une approche dyadique et longitudinale

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Thèse présentée en vue de l'obtention du grade de

Philosophiae Doctor (Ph.D.)

En psychologie recherche et intervention

Option clinique

Avril 2022

Université de Montréal

Département de psychologie, Faculté des arts et des sciences

Cette thèse intitulée

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Résumé

L'une des causes la plus fréquente de douleur génito-pelvienne est la vestibulodynie provoquée (VP), qui affecterait 8% à 12% des femmes de la population générale (Harlow et al., 2014). Elle se caractérise par une douleur à l'entrée du vestibule vulvaire provoquée par l'application d'une pression, principalement lors des relations sexuelles. La VP a de nombreuses conséquences négatives sur la vie sexuelle, relationnelle et psychologique des femmes et de leurs partenaires amoureux (Bergeron et al., 2015). Des études ont démontré que certains facteurs interpersonnels affectent l'intensité de la douleur et l'ajustement des couples à la VP (Rosen & Bergeron, 2019). Bien qu'associée à des niveaux plus élevés de douleur chez les femmes et à une plus faible fonction et satisfaction sexuelles chez les couples avec la VP, l'insécurité d'attachement (i.e., anxiété d'abandon et/ou évitement de l'intimité) a été peu étudiée dans cette population (Granot et al., 2010; Leclerc et al., 2015). Ainsi, on note une absence d'études utilisant une perspective longitudinale ou dyadique, malgré le contexte très intime dans lequel la douleur survient. De plus, aucune étude n'a examiné ses associations avec des facteurs proximaux pouvant influencer la douleur ou encore en contexte de traitement. Ainsi, l'objectif général de la thèse était de mieux comprendre les mécanismes liés à l'attachement qui sous-tendent l'ajustement des femmes et de leur partenaire à la VP. Le premier article examinait les associations longitudinales entre l'attachement, le sentiment d'auto-efficacité dans la gestion de la douleur et l'intensité de la douleur chez les couples avec la VP. Deux-cent-treize couples avec la VP ont complété des questionnaires auto-rapportés lors de deux temps de mesures, espacés de deux ans. Les résultats ont démontré qu'une plus grande anxiété d'abandon prédisait un plus faible sentiment d'auto-efficacité dans la gestion de la douleur, qui en retour prédisait une plus grande intensité de la douleur chez les femmes deux ans plus tard. Plus d'évitement de l'intimité chez les femmes avec la VP était également un prédicteur d'une plus grande intensité de la

douleur deux ans plus tard. Le second article de la thèse examinait les associations entre l'attachement, les réponses des partenaires et l'ajustement sexuel et relationnel chez 125 couples avec la VP. Des effets acteurs et partenaires ont été trouvés dans les associations entre l'insécurité d'attachement et plus de réponses négatives et moins de réponses facilitatrices pour les deux membres du couple, qui en retour était associé à un plus faible bien-être sexuel et relationnel. Le troisième article a examiné l'attachement et la maltraitance à l'enfance comme modérateurs de l'efficacité thérapeutique en comparant un traitement médical – la lidocaïne topique – à une thérapie cognitive comportementale de couple (TCCC) pour la VP développée par notre équipe. Un essai clinique randomisé impliquant 108 femmes avec la VP a trouvé que les femmes avec des niveaux élevés d'évitement de l'intimité ou de maltraitance à l'enfance bénéficiaient davantage de la lidocaïne que de la TCCC dans l'amélioration de leur satisfaction, leur fonction et leur détresse sexuelles à la fin du traitement ou six mois plus tard. Les implications et les contributions théoriques, cliniques et méthodologiques de ces résultats sont discutées.

Mots-Clés : Attachement amoureux, vestibulodynie provoquée, thérapie de couple, modérateur de traitement, douleur chronique, auto-efficacité, réponses des partenaires, sexualité

Abstract

One of the most common causes of genito-pelvic pain is provoked vestibulodynia (PVD), affecting approximately 8% to 12% of women in population-based samples (Harlow et al., 2014). PVD is characterized by pressure provoked pain at the entrance of the vulvar vestibule, occurring mostly during sexual intercourse. PVD has deleterious effects on women and partners' psychological, sexual and relational wellbeing (Bergeron et al., 2015), Studies show that proximal and distal interpersonal factors are associated with pain intensity and couples' adjustment to PVD (Rosen & Bergeron, 2019). Although associated with greater pain intensity and poorer sexual satisfaction and function in couples with PVD, attachment insecurity (i.e., abandonment anxiety and/or avoidance of intimacy) has been scantily studied in this population (Granot et al., 2010; Leclerc et al., 2015). In fact, very few studies have examined the impact of attachment on couples' adjustment while using longitudinal or dyadic methodologies, despite the very intimate nature of the context in which pain arises. Also, no study to date has examined attachment in relation to proximal variables affecting the pain experience or in a treatment setting. Therefore, the overarching goal of this thesis was to better understand how attachment affects couples' adjustment to PVD. The first article of the thesis examined the longitudinal associations between attachment, pain self-efficacy and pain intensity in women and their partners. Two-hundred and thirteen couples completed self-report questionnaires on two occasions, spaced out over two years. Results showed that greater attachment anxiety predicted lower pain self-efficacy in women with PVD, which in turn predicted higher pain intensity two years later. Greater attachment avoidance in women with PVD also predicted higher pain intensity over two years. The second article tested the associations between attachment, partner responses to pain and relationship and sexual adjustment in 125 couples with PVD. Actor and partner effects were found between attachment insecurity and greater negative and fewer

facilitative partner responses for both members of the couple, which in turn was associated with poorer relational and sexual wellbeing. The third article examined attachment and childhood maltreatment as moderators of treatment efficacy while comparing a first line medical treatment – topical lidocaine – to cognitive-behavioral couples therapy (CBCT) for PVD developed by our team. In a randomized clinical trial implicating 108 women with PVD, higher levels of attachment avoidance or childhood maltreatment were associated with poorer outcomes in CBCT compared to topical lidocaine on women's sexual satisfaction and function at either post-treatment or 6-month follow-up. Implications of the results, along with theoretical, clinical, and methodological contributions of the thesis are discussed.

Keywords: Attachment, provoked vestibulodynia, couples therapy, treatment moderator, chronic pain, self-efficacy, partner responses, sexual wellbeing

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DISCUSSION GÉNÉRALE

Liste des abréviations

ADMoCP	Attachment diathesis model of chronic pain
APIM	Actor-partner interdependence model
ARCL	Autoregressive cross-lagged
CBCT	Cognitive behavioral couples therapy
CBT	Cognitive behavioral therapy
CFI	Comparative fit index
CM	Childhood maltreatment
CTQ	Childhood trauma questionnaire
ECR	Essai clinique randomisé
FIML	Full information maximum likelihood
GMSEX	General measure of sexual satisfaction
ICP	Individuals with chronic pain
NRS	Numerical rating scale
PISES	Painful intercourse self-efficacy scale
PVD	Provoked vestibulodynia
RCT	Randomized clinical trial
RMSEA	Root–mean-square error of approximation
SD	Standard deviation
SRMR	Standardized root-mean-square residual
TCCC	Thérapie cognitive comportementale de couple
TCCÉ	Thérapie de couple centrée sur les émotions
VP	Vestibulodynie provoquée

Remerciements

Ce long parcours au doctorat, marqué de belles réussites, d'embuches, d'apprentissages nombreux, d'humilité, et de grandes joies n'aurait pas été possible sans un réseau de personnes formidables auprès desquelles j'ai pu évoluer, apprendre et trouver refuge.

Sophie, c'est avec le cœur gros que j'écris ces quelques lignes. Mon parcours universitaire n'aurait pas été le même sans ta présence bienveillante. On dit souvent que « quand on se compare, on se console », mais j'avance sans l'ombre d'un doute que les étudiants qui se sont comparés à moi m'ont jalousée, à chaque étape, à chaque embuche, à chaque tournant. Tu as su être une directrice et une superviseure sensible, compréhensive et accueillante, mais aussi exigeante et stimulante, m'amenant à repousser mes limites et à relever des défis qui m'apparaissaient parfois, à tort, trop grands. Merci d'avoir franchement cru en mes capacités, et de m'avoir amenée à croire un peu plus en moi, moi aussi, au terme de ce long parcours. J'ai énormément de gratitude d'avoir pu passer autant d'années auprès d'une personne aussi inspirante et je te serai à jamais reconnaissante de m'avoir accompagnée dans mon cheminement professionnel et personnel durant cette période de ma vie.

Mylène, ta disponibilité, ta présence rassurante, ta gentillesse et ta constance ont rendu ce parcours tellement plus facile et agréable. Tu es une ressource indispensable pour tous les étudiants qui ont la chance de te côtoyer et je veux te remercier pour ton aide, ton soutien et pour les rires, même quand j'avais l'impression que je n'étais #pucapab.

Merci aux participants des deux études réalisées au cours de cette thèse, dont certains que j'ai eu la chance de rencontrer. Merci pour votre temps et pour votre confiance. Cette thèse n'aurait pas été possible sans vous.

Merci aux Fonds de Recherche du Québec, à la Faculté des Études Supérieures et Postdoctorales, au Laboratoire d'Étude de la Santé Sexuelle et au CRIPCAS pour votre soutien

financier qui m'a permis de réaliser de grands accomplissements et de me consacrer pleinement à mes études tout en préservant un équilibre de vie.

Merci à la communauté de Thèsez-Vous et à toutes les rencontres que j'y ai faites au fil de mon parcours. L'espace précieux que vous avez créé m'a permis de briser l'isolement de la rédaction et de rester motivée tout au fil de mon parcours.

À mes collègues de laboratoire : Serena, Myriam, Marie, Laurence, Jean-François, Alice, Marie-Michelle et Beata, merci pour les échanges stimulants, les séances de lamentations et tous les bons moments partagés au labo. Je repars avec des souvenirs positifs et uniques avec chacun de vous.

À deux acolytes bien spéciales, Myriam et Noémie. Vous êtes des femmes extraordinaires et inspirantes que j'ai maintenant la chance d'appeler des amies. Merci d'avoir été des personnes de confiance vers qui j'ai pu me tourner pendant ce parcours par moment insécurisant. Votre soutien et votre amitié me sont sincèrement précieux.

Marie-Pier, qui aurait pensé qu'une consultation en statistique se serait soldée en un amour amical entre une anxieuse et une évitante? Je pourrais te remercier pour ton temps et ta patience pendant les nombreuses, nombreuses, séances de stats, mais ce serait réducteur à l'importance colossale que tu as eue dans mon parcours au doctorat. Merci pour ton écoute, ton soutien, ton sarcasme, et pour le nombre incalculable de rires partagés autour de blagues que personne d'autre ne trouve drôles. Tu as eu pour moi un rôle de mentor, de grande sœur, et surtout d'amie précieuse pendant toutes ces années et je ne te remercierai jamais assez d'avoir rendu cette aventure tellement plus légère et paisible. C'est avec sincérité que je te dis que je ne sais pas comment j'y serais arrivée sans toi.

Plusieurs personnes ont également marqué mon développement professionnel, comme chercheure et comme clinicienne, au cours des six dernières années. Merci à Natalie O. Rosen,

Pierre McDuff, Audrey Brassard, Daniel Moisan, Stéphanie Couture, Delphine Maillé, Marie-Alexia Allard, Julie Larouche, Gerald Wiviott et Véronique Rouvès pour votre générosité dans le partage de votre temps et de vos connaissances.

Au fil de mes études, j'ai rencontré des personnes incroyables que je compte aujourd'hui avec grande joie parmi mes amis.

Ma chère Fanie, notre amitié est probablement l'une des plus belles choses que ce doctorat m'aura apportées. Je ne peux imaginer ce qu'auraient été ces années si tu n'avais pas été là. Je me sens privilégiée d'avoir réalisé ce parcours à tes côtés et d'avoir pu vivre tellement de petits et de grands moments avec toi. Merci. Pour tout.

Mes *outsiders* : Laurence et Guillaume. Partager cette expérience avec vous a été un moment de solidarité sans comparable. Votre présence au fil de ces années m'a permis de prendre les choses avec plus de douceur et avec beaucoup d'humour.

Ma *gang* des initiations (qui s'est largement étendue avec le temps) : Marie-Pier, Amélie, Catherine D., Marie-Jeanne, Catherine G., Marie-Laurence, Laurie. Merci pour les beaux moments que nous continuons de partager après toutes ces années. Vous êtes des femmes brillantes et admirables.

À mes amis d'amour : Alexandra, Caroline, Émilie, Ève, Jenny-Lee, Kim, Laurianne, Marion, Mylène, Vicky et les Célibataires. Merci de m'avoir offert un espace précieux pour exister à l'extérieur de mon rôle d'étudiante. Votre présence a été importante pour moi.

Mes chers Marie et François, merci de m'avoir offert un refuge où décrocher et de votre amour incessant malgré la distance qui nous sépare depuis tant d'années.

Anne-Marie, merci d'être ma cheerleader no.1 tout au fil de ce parcours. Tes encouragements et ta présence ont été une source d'apaisement sans comparable.

Marie-Claude, ma sœur de cœur. Merci de me permettre d'être juste moi, dans ma gloire comme dans ma noirceur. La valeur de notre amitié est inestimable à mes yeux.

Maman, Papa, Luc, merci de votre soutien et de votre intérêt pour chacune des étapes de cette longue route. Vos encouragements et votre fierté m'ont poussée à donner le meilleur de moi-même. Comme toujours, vous avez tout fait pour rendre ce parcours le plus facile et confortable que possible. Je serai éternellement reconnaissante pour votre générosité et votre amour inconditionnel. Merci au reste de ma famille pour votre appui, votre enthousiasme et votre curiosité énergisante pendant ces années. Merci pour les innombrables repas en famille qui m'ont permis de me ressourcer auprès des miens et de me ramener à l'essentiel ; l'amour que nous partageons.

Je ne pourrais conclure ces remerciements sans savoir gré à mon loyal compagnon d'écriture, Yéti Spaghetti, qui me rappelle (parfois avec insistance) l'importance de profiter du moment présent et de prendre le temps de jouer, à tous les jours.

CHAPITRE I : INTRODUCTION

Tel qu'énoncé par Emily Nagoski, autrice du populaire ouvrage grand public *Come As You Are* : « Sex is an attachment behavior, reinforcing the social bond between adults. Sometimes it takes the form of passionate, joyful sex between people who are falling in love with each other. Sometimes it takes the form of desperate, grasping sex between people whose attachment is threatened. » (Nagoski, 2015). Mais qu'en est-il de ces couples pour qui l'expression de l'attachement est compromise par une dysfonction sexuelle? Pour qui la douleur sexuelle récurrente entrave l'effloraison du plaisir sexuel partagé? La présente thèse a comme objectif général d'examiner les corrélats de l'attachement chez les femmes et les couples qui font face aux défis entourant la douleur génito-pelvienne.

Description et classification

La douleur génito-pelvienne se caractérise par des difficultés sexuelles liées à la présence de douleur ou à la peur de vivre de la douleur lors de la pénétration. Elle est un trouble sexuel classifié dans la cinquième édition du *Diagnostic and Statistical Manual of Mental Disorders* sous la catégorie de troubles de la douleur génito-pelvienne et/ou de la pénétration (DSM-5, American Psychiatric Association, 2013). Ses critères diagnostiques sont une difficulté persistante ou récurrente (6 mois ou plus) et une détresse psychologique marquée en lien avec soit 1) le fait d'avoir une pénétration vaginale durant les relations sexuelles, 2) une douleur vulvovaginale ou pelvienne marquée lors des relations sexuelles ou des tentatives de pénétration, 3) une anxiété ou une peur marquée en lien avec la douleur vulvovaginale ou pelvienne relative à l'anticipation de celle-ci, ou durant et/ou résultant de la pénétration vaginale ou 4) une tension ou serrement des muscles du plancher pelvien durant les tentatives de pénétration.

L'une des causes les plus fréquentes de douleur génito-pelvienne est la vulvodynie, caractérisée par une douleur récurrente et inexpliquée, en l'absence de lésion, d'infection ou

d'inflammation. La vulvodynie affecterait de 8 à 10% des femmes de tous âges à un point donné dans le temps, et une femme sur quatre au cours de sa vie (Bergeron et al., 2020; Bornstein et al., 2016; Pukall et al., 2016; Reed et al., 2012). La vestibulodynie provoquée (VP) est la forme la plus fréquente de vulvodynie (Lamvu et al., 2015). La douleur associée à la VP se localise à l'entrée du vestibule vulvaire (à l'entrée du vagin) et est provoquée par l'application d'une pression à cet endroit, comme lors des relations sexuelles ou de l'insertion d'un tampon. Cette douleur est décrite comme une sensation de brûlure, de coupure ou de déchirure par les femmes avec la VP et varie d'une douleur modérée à une douleur intense, pouvant rendre la pénétration vaginale ou l'examen gynécologique impossibles (Moyal-Barracco & Lynch, 2004). La VP peut être qualifiée de primaire, soit présente dès la toute première tentative de pénétration mécanique, manuelle ou pénienne du vagin, ou de secondaire, où la douleur serait apparue au cours de la vie sexuelle de la femme (Bornstein et al., 2016).

Bien que la VP occasionne une détresse importante chez les femmes qui en souffrent, peu d'entre elles reçoivent une attention médicale adéquate (Bergeron et al., 2020). En effet, seulement 50 à 60% des femmes rapportant de la douleur génito-pelvienne chronique iraient chercher de l'aide professionnelle et seulement la moitié d'entre-elles recevraient un diagnostic formel (Harlow et al., 2014; Nguyen et al., 2013). De plus, elles devraient consulter plusieurs spécialistes avant d'avoir une prise en charge adéquate. Une étude démontre même qu'avant d'obtenir un diagnostic formel de VP, environ 37% des femmes auraient attendu plus de trois ans et 35% auraient eu une quinzaine de rendez-vous médicaux (Connor et al., 2013). De plus, les études qualitatives et quantitatives démontrent que plusieurs femmes ont un faible sentiment de confiance envers la capacité des médecins à les soigner, où elles percevraient les médecins comme ayant très peu de connaissances sur la VP et sur la douleur génito-pelvienne en général (Connor et al., 2013; Shallcross et al., 2019). Plusieurs rapportent se sentir jugées par les

professionnels de la santé et avoir l'impression d'être perçues comme exagérant leur douleur, voire l'utilisant comme prétexte pour éviter d'avoir des relations sexuelles. En effet, plusieurs femmes avec la VP évoquent que leur médecin aurait insinué que leur problème est « dans leur tête », qu'elles sont « névrosées » ou « hystériques », qu'elles doivent simplement se détendre, ou qu'il est normal que la sexualité soit douloureuse pour les femmes, suscitant des sentiments de honte, de colère et l'impression d'être incomprises chez les femmes avec la VP (Donaldson & Meana, 2011; Nguyen et al., 2013; Shallcross et al., 2018; Shallcross et al., 2019). Bien que des efforts soient déployés pour informer davantage les femmes qui vivent de la douleur génito-pelvienne (Brotto et al., 2021), ces barrières au traitement de la VP peuvent contribuer à la recrudescence de la douleur dans le temps et au maintien de ses conséquences psychologiques et interpersonnelles, suscitant une détresse importante chez les femmes et les couples qui y sont confrontés (Shallcross et al., 2018; Shallcross et al., 2019). Ces effets pourraient être notamment modulés par le contexte social dans lequel la VP survient (Rosen & Bergeron, 2019). En effet, les femmes de certaines minorités ethniques ou d'un plus jeune âge sont davantage soumises à des enjeux culturels entourant la performance sexuelle et l'image de la femme (Viner et al., 2012). Des études démontrent d'ailleurs que les femmes hispanophones sont plus sujettes à avoir de la douleur lors des premières relations sexuelles et les femmes afro-américaines sont moins susceptibles d'obtenir une attention médicale adéquate lorsqu'elles rapportent de la douleur, mettant en évidence les différences socioculturelles pouvant contribuer au maintien de la VP (Nguyen et al., 2015; Singhal et al., 2016).

Les conséquences de la VP

La VP survenant principalement dans le contexte des activités sexuelles, celle-ci a des répercussions sur le bien-être sexuel des femmes, mais aussi celui de leur partenaire amoureux. De plus, outre ses effets délétères inhérents sur la sexualité, la VP affecte les dimensions

relationnelle et identitaire des femmes, faisant en sorte que ses conséquences dépassent largement la sphère de la sexualité.

Conséquences pour les femmes

De nombreuses études contrôlées démontrent que la présence de la douleur génito-pelvienne a un effet délétère important sur la sexualité des femmes qui en souffrent. En effet, comparativement aux femmes qui n'éprouvent pas de douleur, les femmes avec la VP rapportent des niveaux plus élevés de détresse sexuelle et de plus faibles satisfaction et fonction sexuelles, avec des niveaux cliniques de faible désir et d'excitation sexuelle (Farmer & Meston, 2007; Gates & Galask, 2001; Masheb et al., 2004; Meana et al., 1997; O. Rosen et al., 2017; Pazmany et al., 2014; Smith & Pukall, 2011). Elles rapporteraient également des fréquences d'orgasme et de relations sexuelles moins élevées que les femmes sans ce problème médical. De plus, les femmes avec la VP auraient davantage d'anxiété reliée à la pénétration – mesurée en termes d'activité neuronale et de façon subjective –, et auraient une attitude et des croyances plus négatives reliées à la sexualité (Pazmany et al., 2017). Des études quantitatives et qualitatives démontrent que les femmes avec la VP rapporteraient davantage de difficultés liées à leur perception d'elles-mêmes comme partenaire sexuelle, où elles auraient davantage de préoccupations liées à leur image corporelle et à leur estime de soi sexuelle, se percevraient comme étant atteintes dans leur féminité, et rapporteraient se sentir anormales, moins désirables et moins confiantes vis-à-vis leur sexualité (Ayling & Ussher, 2008; Gates & Galask, 2001; Granot & Lavee, 2005; Maillé et al., 2015; Pazmany et al., 2013a, 2013b; Shallcross et al., 2018).

Outre les conséquences importantes de la VP sur la sexualité des femmes qui en sont atteintes, des études contrôlées démontrent que les femmes avec la VP rapporteraient davantage de symptômes anxieux et dépressifs (Granot & Lavee, 2005; Khandker et al., 2011; Landry & Bergeron, 2011; Payne et al., 2005). Les études qualitatives montrent également que les femmes

avec la VP rapportent de la détresse psychologique importante, incluant des sentiments de honte, de culpabilité et une faible estime de soi rattachée à leur expérience de douleur (Shallcross et al., 2018).

Conséquences pour le couple et les partenaires

Bien que les femmes avec la VP soient couramment perçues comme le « patient identifié », les partenaires amoureux de celles-ci vivent également les conséquences de cette affection médicale. Comparativement aux partenaires ne vivant pas cette difficulté, ceux de femmes avec la VP rapportent une plus faible satisfaction sexuelle, davantage de dysfonctions érectiles et davantage de difficultés liées à la communication sexuelle (Pazmany et al., 2014; Smith & Pukall, 2014). Ils rapportent également davantage de symptômes dépressifs, ce qui en retour serait associé à davantage de douleur et un plus faible bien-être sexuel chez les femmes (Chisari et al., 2021; Pazmany et al., 2014; Smith & Pukall, 2014). Bien que les couples avec la VP ne rapportent pas une satisfaction relationnelle plus faible que les couples ne vivant pas cette problématique (Smith & Pukall, 2011), près des trois quarts des partenaires rapportent voir leur relation affectée négativement par la VP (Smith & Pukall, 2014). On retrouve ce même phénomène chez les femmes, où plusieurs rapportent que leur relation avec leur partenaire est affectée négativement par la douleur, qu'elles craignent de perdre leur partenaire amoureux, et s'engagent dans des activités sexuelles malgré la douleur (Elmerstig et al., 2008; Shallcross et al., 2018; Sheppard et al., 2008). Une étude qualitative auprès de partenaires de femmes avec la VP rapporte que ces derniers disent éprouver de la détresse sexuelle et des émotions négatives de honte, de culpabilité et de frustration associée à la présence de la VP et au manque d'intimité physique et émotionnelle, suscitant des tensions et des difficultés de communication au sein de leur relation de couple (Sadownik et al., 2017). De surcroit, cette étude démontre que les partenaires se perçoivent comme étant inadéquats comme partenaire sexuel, tout comme les

femmes confrontées à cette expérience. Cependant, il importe de souligner qu'on note un grand manque de diversité sexuelle et de genre dans les études portant sur les partenaires des femmes avec la VP réalisées à ce jour, limitant les conclusions que nous pouvons tirer quant à l'impact de la VP sur les minorités sexuelles et de genre. En somme, l'ensemble de ces résultats met en lumière l'importance d'examiner la VP dans un contexte dyadique, et soutient que les deux membres du couple se voient affectés dans leur identité, leur sexualité et leur bien-être global.

Étiologie

La VP est maintenant reconnue comme étant une affection médicale ayant des causes multifactorielles. Plusieurs auteurs adoptent le modèle biopsychosocial afin de comprendre l'étiologie de la VP (Bergeron et al., 2015), où l'interaction de facteurs biomédicaux, psychosociaux et relationnels contribuerait au développement et au maintien de la VP.

Facteurs biomédicaux

Les études démontrent plusieurs voies biophysiologiques pouvant être associées au risque de développer la VP dans le temps, notamment inflammatoires, hormonales, musculaires et neurobiologiques. En effet, certaines femmes auraient des prédispositions génétiques les mettant plus à risque de souffrir de VP, notamment à travers un risque accru d'infections vaginales, une réponse inflammatoire altérée, prolongée et exagérée de la région pelvienne et/ou une sensibilité accrue aux stimuli douloureux (Lev-Sagie et al., 2009; Wesselmann et al., 2014).

En ce qui concerne l'histopathogenèse entourant la VP, les études démontrent une association entre l'historique d'infection vaginale à levure et le risque de développer la VP. Aussi, on retrouve une fréquence deux fois plus élevée d'infection vaginale à levure chez les femmes avec la VP (Harlow et al., 2017). Par ailleurs, les femmes souffrant de VP auraient une plus grande réaction inflammatoire au Candida Albicans (levure causant les infections vaginales) que les femmes sans VP. Il a été proposé que la VP pourrait être causée par une réponse

inflammatoire locale, soit dans la région des tissus vulvo-vaginaux, suggérant que le fait de tarder à soigner une infection vulvovaginale et l'inflammation qui s'ensuit pourrait mener à l'hypersensibilité des terminaisons nerveuses du vestibule vulvaire, et mettre les femmes plus à risque de développer la VP (Bornstein et al., 2008; Chalmers et al., 2016; Foster et al., 2015; Pukall et al., 2002). Cependant, une revue de la littérature récente portant sur l'association entre la VP et les infections vaginales à levure invite les chercheurs à considérer la VP comme un trouble de douleur chronique inexpliqué en raison de l'hétérogénéité des résultats à ce sujet et du manque de rigueur dans les devis scientifiques employés pour vérifier cette association (Leusink et al., 2018).

De plus, bien que certaines études rapportent également des résultats contradictoires à ce sujet (Arnold et al., 2006; Reed et al., 2013), plusieurs d'entre elles suggèrent que l'utilisation de contraceptifs hormonaux serait associée à un risque de 4 à 11 fois plus élevé de développer la VP, selon la durée de l'utilisation du contraceptif, l'âge de son premier usage et la composition hormonale du contraceptif (Aerts & Pluchino, 2021; Bouchard et al., 2002; Goldstein et al., 2014). En effet, l'utilisation de contraceptifs hormonaux entrainerait des changements morphologiques causant une atrophie, une hypolubrification et une perte d'élasticité de la muqueuse vaginale pouvant provoquer une augmentation de la douleur durant les relations sexuelles. De plus, la prise de contraceptifs hormonaux entrainerait également des altérations dans la perception de la douleur à un niveau local – soit dans la zone vulvo-vaginale – mais également au niveau du système nerveux central et périphérique (Aerts & Pluchino, 2021). Cependant, il a été suggéré que les associations entre la prise de contraceptifs hormonaux et la VP pourraient être modulées par la vulnérabilité génétique aux effets nocifs des contraceptifs hormonaux chez certaines femmes, expliquant potentiellement les résultats antithétiques à ce sujet (Goldstein et al., 2014).

Certains facteurs relevant de la musculature du plancher pelvien pourraient également être associés au risque de développer la VP. En effet, les études de Morin et al. (2014) et de Morin, Binik, et al. (2017) ont démontré une hypertonicité, un faible contrôle, une faible force, et une faible endurance des muscles du plancher pelvien chez les femmes souffrant de VP comparativement aux femmes asymptomatiques. De plus, l'intensité des dysfonctions de muscles du plancher pelvien serait associée à l'intensité de la douleur rapportée par les femmes avec la VP (Morin, Binik, et al., 2017). Cependant, les études à ce jour n'ont pas permis de départager si les changements dans la musculature du plancher pelvien précéderaient le développement de la VP ou au contraire, en seraient des conséquences.

Finalement, d'un point de vue neurologique, certaines études contrôlées ont démontré que les femmes avec la VP seraient plus susceptibles de souffrir d'allodynie lors de l'application de stimuli non-douloureux dans la région vulvaire et d'hyperalgésie lors de l'atteinte du seuil de douleur chez celles-ci (Wesselmann et al., 2014). Ceci s'expliquerait entre autres par une hyperdensité des nocicepteurs dans la région vaginale, faisant en sorte que les femmes avec la VP éprouveraient de la douleur en raison d'une hypersensibilité du système nerveux périphérique (Goetsch et al., 2010; Tympanidis et al., 2003). Plus récemment, les études tendent à appuyer l'hypothèse selon laquelle la VP serait associée à une neuropathologie centrale, où les femmes avec la VP percevraient la douleur avec une plus grande intensité, autant dans les régions vulvo-vaginales que dans d'autres régions du corps (Pukall et al., 2005; Torres-Cueco & Nohales-Alfonso, 2021; Wesselmann et al., 2014; Wesselmann & Czakanski, 2020). En effet, les études démontrent des niveaux élevés de comorbidités entre la VP et d'autres types de douleur chronique, tels que la fibromyalgie, la cystite interstitielle et le syndrome du côlon irritable (Pukall et al., 2020). L'étude de Reed et al. (2012) rapporte que les femmes avec la VP seraient 2,3 à 3,4 fois plus susceptibles de souffrir de troubles de douleur comorbides, et qu'inversement,

les personnes souffrant de troubles de douleur chronique seraient également 2,3 à 3,3 fois plus à risque de souffrir de VP. Quant à elle, l'étude de Nguyen et al. (2012) réalisée auprès de 2000 femmes avec la VP révèle que 45% d'entre-elles souffrirait d'une autre forme de douleur chronique. De surcroit, des études d'imageries cérébrales révèlent que les femmes avec la VP auraient une hyperactivation cérébrale lorsque confrontées à des stimuli douloureux comparativement à des groupes contrôles, suggérant une altération centrale dans le processus de modulation de la douleur (Yessick et al., 2021). L'ensemble de ces résultats appuient l'idée selon laquelle la VP pourrait découler d'une neuropathologie suscitant une hyperactivation centrale aux stimuli douloureux.

Facteurs psychologiques

Bien que la VP soit fréquemment traitée et perçue comme une problématique de santé physique, plusieurs facteurs psychosociaux sont associés au développement et au maintien de la VP et à l'exacerbation de ses conséquences dans le temps.

Parmi ceux-ci, la dépression a été identifiée comme un facteur de risque associé à la VP et à la sévérité de ses conséquences. En effet, les femmes avec des antécédents de dépression seraient plus à risque de développer la VP, et les jours où les femmes avec la VP rapportent davantage de symptômes dépressifs, elles rapportent également des niveaux de douleur plus élevés, une plus faible fonction sexuelle et davantage de détresse liée à leur sexualité (Khandker et al., 2011; Pâquet et al., 2018). De plus, les femmes avec la VP vivant un sentiment d'injustice plus élevé quant à leur situation rapportent des niveaux de douleur plus élevés, davantage de détresse liée à leur sexualité, ainsi que des plus faibles satisfaction et fonction sexuelles (Pâquet et al., 2016).

L'anxiété, et ses ramifications, sont l'un des facteurs les plus grandement étudiés dans le contexte de la VP, considérant son importance dans le maintien de la douleur chronique (Vlaeyen

& Linton, 2012). En effet, les femmes ayant un antécédent de trouble anxieux seraient 10 fois plus à risque de développer la VP comparativement aux femmes sans problématique anxieuse (Khandker et al., 2011). De plus, une étude longitudinale sur 7 ans réalisée auprès de 173 femmes avec la VP démontre d'ailleurs que l'anxiété est un prédicteur du maintien de la douleur dans le temps (Pâquet et al., 2019). De façon plus proximale, une étude à journaux quotidiens démontre que les jours où les femmes avec la VP ont des activités sexuelles, un niveau plus élevé d'anxiété est associé à davantage de douleur et de dysfonction sexuelle (Pâquet et al., 2018). Le *Modèle Peur-Évitement* identifie l'anxiété comme étant central au développement et au maintien de la douleur chronique. Ce modèle suggère que la douleur, à la base aigüe, se transformerait en douleur chronique en raison d'un cercle vicieux entre des pensées catastrophiques, une peur exagérée de la douleur, l'hypervigilance face aux expériences douloureuses et l'évitement de comportements suscitant de la douleur, résultant en un maintien de la douleur chronique. Ainsi, les individus ayant un niveau élevé de catastrophisme, d'hypervigilance et de peur se verraient entraînés dans ce cercle vicieux, où ils percevraient une plus grande intensité de la douleur et tendraient à éviter certains comportements crus douloureux, contrairement à ceux ayant un niveau de catastrophisme plus faible, qui se verraient davantage enclins à confronter la douleur et à avoir un meilleur rétablissement (Vlaeyen & Linton, 2012). Des études se penchant sur les différentes composantes du *Modèle Peur-Évitement* chez les femmes avec la VP trouvent que des niveaux plus élevés de catastrophisme, de peur de la douleur et d'hypervigilance sont associés à des niveaux plus élevés de douleur durant les relations sexuelles, à davantage d'évitement des activités sexuelles pénétratives et à un plus faible fonctionnement sexuel (Anderson et al., 2016; Benoit-Piau et al., 2018; Brown et al., 2021a; Chisari et al., 2021; Desrochers et al., 2009).

Variable à l'étude : Sentiment d'auto-efficacité dans la gestion de la douleur. Plus récemment, la variable de l'auto-efficacité face à la douleur s'est ajoutée au *Modèle Peur-*

Évitement. L'auto-efficacité, telle qu'introduite par Bandura (1977; 1994), est définie comme la confiance que l'on peut entreprendre des actions qui mèneront aux résultats désirés dans une situation donnée et détermine le niveau de persévérance et d'efforts déployés par un individu en contexte d'adversité ou lorsque des obstacles sont rencontrés. En contexte de douleur chronique, le sentiment d'auto-efficacité est associé à la recherche de solution et à la prise d'actions pour soulager ou gérer sa douleur, mais affecte également la perception de ses habiletés à se confronter aux situations pouvant éliciter de la douleur (Jackson et al., 2014). L'auto-efficacité face à la douleur est vue comme un facteur de protection dans les populations de douleur chronique, et une méta-analyse démontre qu'un niveau élevé d'auto-efficacité personnelle est significativement associé à des niveaux plus faibles d'incapacité, de détresse psychologique et d'intensité de la douleur de façon transversale et longitudinale (Jackson et al., 2014). Des études examinant le sentiment d'auto-efficacité en parallèle aux autres variables du *Modèle Peur-Évitement* ont d'ailleurs trouvé que cette première variable était plus fortement associée au niveau d'incapacité que les autres variables du modèle (Costa et al., 2011; Denison et al., 2007; Desrochers et al., 2009; Thompson et al., 2010). Certaines études démontrent même que par l'entremise de l'effet médiateur de l'auto-efficacité, la peur de la douleur et le catastrophisme sont associés au niveau d'incapacité et de douleur (Carpino et al., 2014; Slepian et al., 2020; Woby et al., 2007).

Chez les femmes avec la VP, seulement quelques études se sont penchées sur l'examen de l'auto-efficacité face à la douleur lors des relations sexuelles. Une première étude transversale de Desrochers et al. (2009) a trouvé qu'un faible niveau d'auto-efficacité, dans un modèle incluant les autres variables du *Modèle Peur-Évitement*, était associé à une plus grande intensité de la douleur chez les femmes avec la VP. L'auto-efficacité contribuait de façon unique à une faible fonction sexuelle chez ces dernières, appuyant l'idée que l'auto-efficacité puisse être plus fortement associée au degré d'incapacité que les autres variables du *Modèle Peur-Évitement.* Une

seconde étude examinant l'auto-efficacité et les variables du *Modèle Peur-Évitement* comme prédicteurs de l'évolution dans le temps de la sexualité et de la douleur des femmes avec la VP a trouvé que l'auto-efficacité au premier temps de mesure était l'unique prédicteur de l'intensité de la douleur, de la satisfaction sexuelle et de la fonction sexuelle au second temps de mesure, deux ans plus tard . De plus, le nombre de tentatives de pénétration agissait comme médiateur au sein de l'association entre l'auto-efficacité et la satisfaction sexuelle, suggérant que les femmes avec un niveau plus élevé d'auto-efficacité seraient moins portées à éviter les activités sexuelles, et ce, malgré la présence de douleur. Enfin, dans une étude de traitement mesurant l'efficacité d'une thérapie cognitive-comportementale pour la VP, l'auto-efficacité au pré-traitement était associée à des degrés plus faibles de douleur au post-traitement (Desrochers et al., 2010).

Facteurs interpersonnels

Vu le contexte intime dans lequel elle survient, plusieurs études récentes se sont penchées sur les facteurs relationnels liés à la VP et épousent une perspective dyadique dans leur examen des facteurs de maintien de la VP. En effet, le récent *Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme* (*Interpersonal Emotion Regulation Model of Women's Sexual Dysfunction* [traduction libre]) suggère que certains facteurs interpersonnels proximaux et distaux affecteraient les habiletés de régulation émotionnelle de chacun des membres du couple, ce qui en retour influencerait la capacité du couple à s'ajuster à la VP et contribuerait au maintien de la douleur dans le temps (Rosen & Bergeron, 2019).

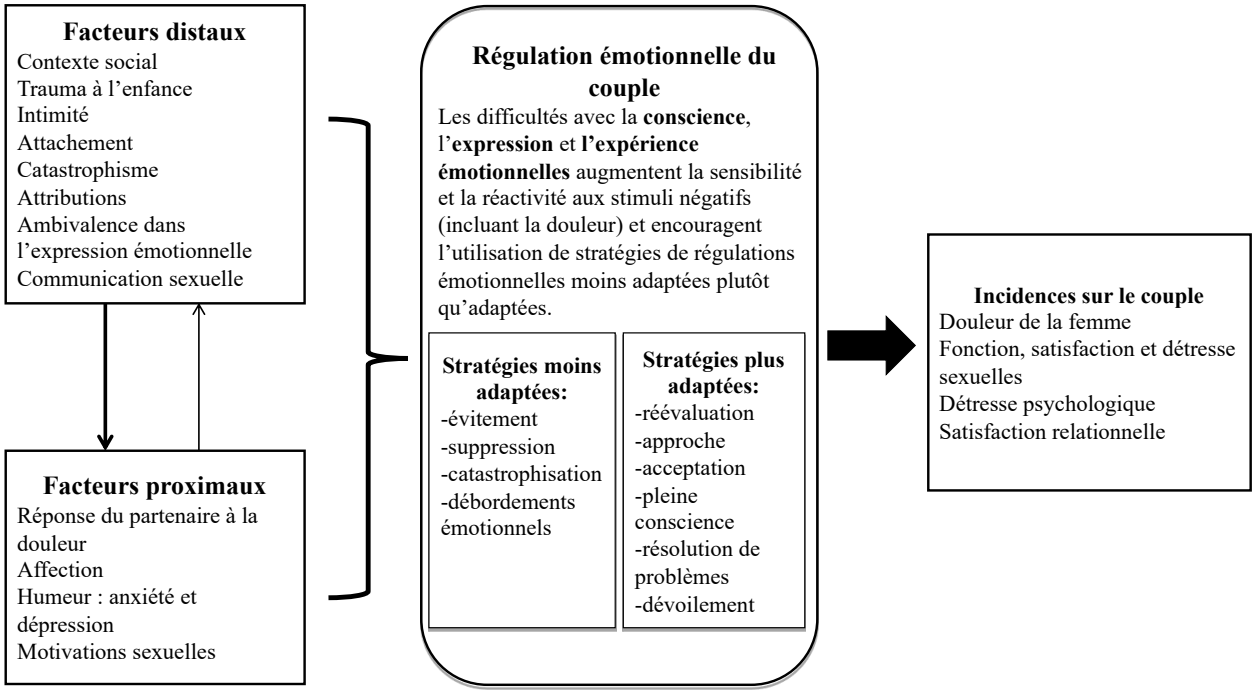

Figure 1. Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme [Traduction libre] (Rosen & Bergeron, 2019). Autorisation obtenue par les auteures du modèle.

Facteurs interpersonnels proximaux. Parmi les facteurs interpersonnels proximaux, il a été identifié que les motivations à s'engager dans la sexualité sont associées au bien-être relationnel et sexuel des couples avec la VP. En effet, comparativement aux femmes sans douleur, les femmes avec la VP auraient davantage tendance à s'engager dans des comportements sexuels avec des buts d'évitement (p.ex., éviter de décevoir son partenaire, éviter un conflit, éviter de perdre son partenaire) qu'avec des buts d'approche (p.ex., promouvoir l'intimité dans la relation, partager le plaisir avec son partenaire, exprimer son amour) (Dubé et al., 2017). Les études transversales et à journaux quotidiens démontrent que ces motivations d'évitement seraient en retour associées à plus de symptômes dépressifs et à de plus faibles satisfaction et fonction sexuelles chez les femmes avec la VP, et à une plus faible satisfaction relationnelle chez les deux

membres du couple, alors que les motivations d'approche seraient associées à une plus grande satisfaction sexuelle et relationnelle et à une meilleure fonction sexuelle chez les deux membres du couple (Muise et al., 2017; Rosen, Muise, Bergeron, Impett, et al., 2015).

Variable à l'étude : Réponses des partenaires à la douleur. Le facteur relationnel proximal le plus étudié auprès des femmes avec la VP est l'ensemble des réponses des partenaires à la douleur lors des relations sexuelles. En effet, les réactions des partenaires à la survenue de la douleur lors des relations sexuelles affecteraient le bien-être psychologique, sexuel et relationnel des deux membres du couple. On recense trois types de réponses des partenaires à la douleur : les réponses facilitatrice (expression d'affection et encouragement de comportements visant l'adaptation à la douleur), les réponses négatives (expression d'hostilité ou de colère et faire abstraction de la douleur) et les réponses de sollicitude (expression d'attention et de sympathie vis-à-vis la douleur).

Les études dyadiques à journaux quotidiens auprès des couples avec la VP démontrent que les réponses facilitatrices sont associées à une plus faible intensité de la douleur, à une meilleure fonction sexuelle chez les femmes avec la VP, ainsi qu'à une meilleure satisfaction sexuelle et relationnelle des deux membres du couple (Rosen, Bergeron, et al., 2015; Rosen, Bergeron, Sadikaj, Glowacka, Delisle, et al., 2014; Rosen, Muise, Bergeron, Delisle, et al., 2015). De plus, une étude récente à journaux quotidiens auprès des femmes avec la VP et leurs partenaires démontre que les démonstrations d'affection chez le couple seraient associées à une meilleure satisfaction sexuelle et conjugale ainsi qu'à une meilleure fonction sexuelle, et ce, indépendamment de la présence de relations sexuelles le jour où les variables ont été mesurées (Vannier et al., 2017). Dans l'ensemble, ces résultats suggèrent que la présence d'affection et de bienveillance entre les partenaires agirait comme facteur de protection pour la vie sexuelle et relationnelle des couples qui vivent avec la VP.

À l'inverse, les réponses négatives, telles que rapportées par les partenaires ou telles que perçues par les femmes, auraient des impacts négatifs sur l'ajustement des couples à la VP en étant associées à une plus faible satisfaction relationnelle et sexuelle, à une plus faible fonction sexuelle et à davantage d'anxiété chez les deux membres du couple ainsi qu'à davantage de symptômes dépressifs et de douleur chez les femmes avec la VP (Rosen et al., 2010; Rosen, Bergeron, et al., 2015; Rosen, Bergeron, Sadikaj, Glowacka, Baxter, et al., 2014; Rosen, Bergeron, Sadikaj, Glowacka, Delisle, et al., 2014; Rosen, Muise, Bergeron, Delisle, et al., 2015). Ces réponses pourraient éliciter des émotions négatives, comme l'anxiété, la honte et la culpabilité vis-à-vis les relations sexuelles et un sentiment d'être inadéquate et insatisfaisante comme partenaire sexuelle et amoureuse, pouvant exacerber ou contribuer au maintien de la douleur dans le temps.

Enfin, les réponses de sollicitudes, bien que pouvant être perçues comme bienveillantes, pourraient encourager le catastrophisme et l'évitement de la sexualité, ce qui en retour aurait des effets mitigés pour la vie sexuelle et relationnelle des couples avec la VP. En effet, les études démontrent que les réponses de sollicitude telles que perçues par les femmes ou rapportées par les partenaires sont associées à des degrés plus élevés de douleur chez la femme et à une plus faible fonction sexuelle chez les deux membres du couple (Rosen et al., 2012; Rosen et al., 2010; Rosen, Bergeron, et al., 2015; Rosen, Bergeron, Sadikaj, Glowacka, Delisle, et al., 2014). Toutefois, les résultats portant sur les effets des réponses de sollicitude sur la satisfaction sexuelle sont plus contradictoires, où certaines études trouvent des associations positives, et d'autres négatives, avec la satisfaction sexuelle (Rosen et al., 2010; Rosen, Muise, Bergeron, Delisle, et al., 2015).

Facteurs interpersonnels distaux. Parmi les facteurs relationnels distaux, la communication sexuelle a été identifiée comme étant importante dans le maintien de la VP.

Comparativement aux femmes sans douleur, les femmes avec la VP auraient davantage de difficultés en ce qui a trait à la communication sexuelle avec leur partenaire, pouvant mener au maintien des difficultés sexuelles à travers le temps (Pazmany et al., 2014). Les études à ce sujet démontrent que la perception d'une bonne communication sexuelle chez les deux membres du couple serait associée à une plus grande satisfaction et fonction sexuelles chez ceux-ci et à des degrés plus faibles de douleur chez les femmes avec la VP (Rancourt et al., 2016). Plus spécifiquement, la communication collaborative – où chacun des membres du couple exprime ses émotions et recherche des solutions – est associée à une plus grande satisfaction sexuelle et relationnelle et à moins de détresse sexuelle chez les deux membres du couple, alors que la communication négative, caractérisée par le retrait ou par la critique, est associée à une plus grande détresse sexuelle et à une plus faible satisfaction relationnelle (Rancourt et al., 2017). En ce sens, bien que peu étudiée, l'ambivalence dans l'expression émotionnelle, se traduisant par la capacité à exprimer ses émotions de façon fluide et non conflictuelle, témoignant d'une bonne régulation émotionnelle, serait associée à une plus grande satisfaction sexuelle et relationnelle, à un meilleur fonctionnement sexuel et à moins de symptômes dépressifs chez les couples vivant avec la VP (Awada et al., 2014).

La capacité à se dévoiler et à émettre des réponses empathiques, deux composantes de l'intimité, est également associée à l'adaptation des couples à la douleur génito-pelvienne. En effet, une série d'études observationnelles auprès de 50 couples avec la VP a trouvé qu'un niveau plus élevé de réponses empathiques – telles qu'observées ou autorapportées - chez chacun des membres du couple était associé à leur plus grande satisfaction sexuelle et relationnelle et une plus faible détresse sexuelle pour les deux partenaires (Bois et al., 2016; Rosen et al., 2016). De plus, le dévoilement de soi autorapporté par chacun des membres du couple était associé à leur plus grande satisfaction sexuelle. Une étude transversale auprès de 91couples vivant avec la VP

démontre que l'intimité relationnelle rapportée par les femmes était associée à leur meilleure fonction sexuelle et que l'intimité sexuelle rapportée par ces dernières était associée à une meilleure fonction et satisfaction sexuelles, ainsi qu'à des niveaux plus élevés d'auto-efficacité dans la gestion de la douleur (Bois et al., 2013). Une récente étude qualitative révèle également que les femmes ayant une plus grande acceptation de leur situation liée à la douleur se voient davantage en mesure de se présenter de façon authentique dans leur relation conjugale et que cette intimité relationnelle et sexuelle mènent à une vie sexuelle épanouissante centrée sur l'affection et le plaisir partagé malgré la présence de douleur (Schneider et al., 2021).

Les attributions quant aux causes et à l'impact de la douleur semble également être associées à l'ajustement des couples à la VP. En effet, les femmes ou les partenaires se voyant comme responsables de la douleur et percevant la VP comme étant une problématique stable et affectant l'ensemble de leur fonctionnement vivraient davantage de détresse psychologique et auraient de plus faibles degrés de satisfaction relationnelle et sexuelle (Jodoin et al., 2011; Jodoin et al., 2008).

Variable à l'étude : Attachement. Bien que l'attachement soit identifié comme l'une des variables distales du *Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme*, peu d'études à ce jour se sont penchées sur son examen chez les couples avec la VP. Pourtant, certains modèles théoriques suggèrent que l'attachement joue un rôle important dans le maintien de la douleur chronique. En effet, Meredith et al. (2008) ont proposé le *Modèle Attachement-Diathèse de la Douleur Chronique* (*Attachment-Diathesis Model of Chronic Pain* [traduction libre]) qui stipule que l'attachement influencerait le développement et l'expérience de la douleur chronique via l'anticipation cognitive associée à l'évolution de la douleur, à l'habileté à gérer la douleur et à la perception du soutien disponible dans l'entourage.

Ces anticipations influenceraient l'ajustement à la douleur chronique par les différentes stratégies d'adaptation utilisées, par la recherche ou non de soutien dans son entourage ou de professionnels et par différentes réponses émotionnelles. Selon ce modèle, une personne ayant un style d'attachement sécurisé se percevrait comme étant habilitée à gérer sa douleur, à être proactive dans la mobilisation de ressources visant à diminuer la douleur et à rechercher davantage de soutien auprès de l'entourage (Meredith, 2016). Au contraire, une personne vivant davantage d'anxiété d'abandon se percevrait comme n'étant pas outillée à faire face à la menace que pose la douleur, à percevoir la douleur comme étant plus intense et menaçante, à rechercher de façon excessive le soutien de son entourage et à consulter davantage de professionnels pour la douleur (Meredith, 2016). Enfin, une personne évitant davantage l'intimité aurait de la difficulté à faire confiance à son entourage, limitant la recherche d'aide et de soutien, aurait moins tendance à consulter et serait encline à minimiser ses symptômes de douleur et à adhérer plus faiblement aux traitements (Meredith, 2016). En soutien à ce modèle, plusieurs études transversales dans le domaine de la douleur chronique ont trouvé des associations entre l'insécurité d'attachement et l'auto-efficacité dans la gestion de la douleur (Martel et al., 2016; Meredith et al., 2006), le catastrophisme (Ciechanowski et al., 2003; Kratz et al., 2012; Meredith et al., 2005), les symptômes dépressifs et anxieux (Ciechanowski et al., 2003; Meredith et al., 2006; Meredith et al., 2007), une perception de la douleur comme menaçante (Meredith et al., 2005), la détresse émotionnelle (Meredith et al., 2005), l'intensité de la douleur et le niveau d'atteinte fonctionnelle (Forsythe et al., 2012; Meredith et al., 2006). Bien que ces travaux portaient sur des facteurs intra-individuels et n'aient pas utilisé de devis dyadique, ce modèle appuie que les différentes stratégies d'hyperactivation ou de désactivation émotionnelle associées à l'insécurité d'attachement pourraient mener au maintien de la douleur chronique, ce qui pourrait également être le cas dans le contexte de la VP. De plus, considérant le rôle important qu'occupe la sexualité

dans l'entretien de la connexion émotionnelle, la régulation des besoins d'attachement et le bien-être relationnel des couples (Birnbaum & Reis, 2019), il serait possible de croire que les individus ayant davantage d'insécurité d'attachement se voient plus lourdement affectés par les obstacles qu'impose la VP à leur vie sexuelle.

En ce sens, les stratégies d'hyperactivation du système d'attachement associées à l'anxiété d'abandon pourraient amener les femmes et leurs partenaires à percevoir la présence de la douleur associée à la VP comme étant plus menaçante pour la pérennité de la relation et amener les couples à avoir davantage de difficulté à réguler les pensées, les émotions négatives associées à la VP et les réponses qui s'ensuivent (Ben-Naim et al., 2013; Ein-Dor et al., 2011). De plus, les femmes avec la VP pourraient avoir tendance à exagérer leur douleur comme façon d'obtenir du soutien et de se sentir proche de leur partenaire, contribuant au maintien de la douleur dans le temps (Muise et al., 2017; Thorn et al., 2004). À l'inverse, les stratégies de désactivation du système d'attachement associées à l'évitement de l'intimité pourraient mener les femmes avec la VP et leurs partenaires à minimiser la menace que pose la VP sur leur relation de couple et à employer des stratégies visant à dénier la détresse associée à la VP, tel que l'évitement de la sexualité ou la minimisation de la douleur et de ses impacts chez soi ou son partenaire, pouvant contribuer à la perpétuation de la douleur (Meredith et al., 2008).

À ce jour, seulement trois études transversales ont examiné l'attachement en contexte de VP. Granot et al. (2010) ont démontré dans une étude contrôlée que les femmes souffrant de VP ont des niveaux plus élevés d'évitement de l'intimité que les femmes n'ayant pas cette affection médicale, ce qui serait associé à une plus grande intensité de la douleur. Quant à eux, Leclerc et al. (2015) ont démontré que l'attachement n'est pas associé à la douleur chez les femmes souffrant de VP. Toutefois, cette étude a trouvé des associations négatives entre l'insécurité d'attachement chez les femmes et leur satisfaction sexuelle. L'évitement de l'intimité chez les

femmes était également associé à leur plus faible fonction sexuelle. De plus, l'insécurité d'attachement chez les partenaires était associée à une plus faible affirmation de soi sexuelle chez ces derniers, et l'évitement de l'intimité était associé à une plus faible satisfaction sexuelle chez les partenaires et chez les femmes avec la VP, soulignant la pertinence d'étudier le rôle de l'attachement dans la VP selon une perspective dyadique. Enfin, l'étude de Bosisio et al. (2019) démontre que plus les femmes avec la VP et leur partenaire rapportent des niveaux élevés d'anxiété d'abandon, moins ils tendent à voir leur partenaire comme faisant preuve d'acceptation, de bienveillance et de compréhension.

Variable à l'étude : traumas interpersonnels à l'enfance. Le *Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme* identifie la maltraitance à l'enfance comme une variable pouvant influencer l'adaptation des femmes et des couples à la VP. La maltraitance à l'enfance se définit comme l'émission ou l'omission d'actes causant un préjudice, un potentiel préjudice ou une menace de préjudice envers un enfant par l'entremise d'abus physique, sexuel, émotionnel et/ou de négligence physique ou émotionnelle (Scher et al., 2004; World Health Organization, 2016). Les études populationnelles démontrent que 35% à 40% des individus rapportent avoir subi de la maltraitance à l'enfance, avec une proportion significativement plus grande pour les filles (Cyr et al., 2013; MacDonald et al., 2016). La maltraitance est largement associée à des difficultés psychologiques et interpersonnelles, mais également à davantage de difficultés sur le plan de la sexualité (Bigras et al., 2021; Norman et al., 2012; Pulverman et al., 2018; Vachon et al., 2015; Vaillancourt-Morel et al., 2020). En effet, les femmes ayant subi un abus sexuel à l'enfance seraient 2,44 fois plus à risque de souffrir de dysfonctions sexuelles à l'âge adulte et plus de 80% des individus consultant en thérapie sexuelle rapporteraient au moins un type de maltraitance (Berthelot et al., 2014; Bigras et al., 2017; Pulverman et al., 2018).

Des études populationnelles démontrent des associations robustes entre la maltraitance à l'enfance et le risque de développer la VP à l'âge adulte. En effet, une étude contrôlée rapporte que les femmes avec la VP seraient respectivement 2,6, 4,1 et 6,5 fois plus à risque de rapporter de la négligence émotionnelle, des abus physiques et des abus sexuels à l'enfance (Harlow & Stewart, 2005). Une autre étude populationnelle rapporte que les femmes avec la VP étaient trois fois plus à risque d'avoir subi ou avoir eu peur de subir des abus physiques ou sexuels sévères à l'enfance (Khandker et al., 2014). Ces résultats seraient également répliqués auprès de populations adolescentes, où celles rapportant de la douleur lors des relations sexuelles dans les six derniers mois seraient également plus enclines à rapporter un historique d'abus sexuel (Landry & Bergeron, 2011).

En ce qui concerne les impacts de la maltraitance à l'enfance chez les femmes avec la VP, les études sont peu nombreuses et démontrent des résultats davantage contradictoires. Une première étude a été réalisée auprès de 151 femmes souffrant de douleur génito-pelvienne (dont 140 de VP) et a montré que 74% de son échantillon rapportait un historique d'abus physique et/ou sexuel à l'enfance (Leclerc et al., 2010). Cette étude démontre que les femmes souffrant de douleur génito-pelvienne et ayant subi un abus sexuel avec pénétration rapportent davantage de détresse psychologique et une plus faible fonction sexuelle, et que les femmes qui associent leurs difficultés sexuelles à leur historique d'abus ont une plus faible fonction sexuelle. L'historique d'abus physique n'était associé à aucune des variables psychosexuelles à l'étude et ni l'abus sexuel ou physique n'était associé à l'intensité de la douleur éprouvée par ces femmes.

Une seconde étude réalisée par Corsini-Munt et al. (2017) a examiné les corrélats dyadiques de la maltraitance cumulative à l'enfance en incluant davantage d'indicateurs de celle-ci, soit l'abus sexuel et physique, mais également l'abus émotionnel ainsi que la négligence émotionnelle et physique. Cette étude a trouvé que les femmes avec la VP avec des degrés plus

élevés de maltraitance à l'enfance rapportaient une moins bonne fonction sexuelle, davantage de symptômes anxieux et plus d'affects négatifs reliés à la douleur. De façon intéressante, la maltraitance à l'enfance chez les partenaires était associée à leur plus faible fonction sexuelle et à plus d'affects négatifs reliés à la douleur chez la femme, mais également à davantage de symptômes anxieux et à une plus faible satisfaction conjugale chez les deux membres du couple.

Enfin, une étude récente réalisée auprès de 402 femmes avec la VP n'a trouvé aucune différence significative entre les femmes ayant subi un abus sexuel à l'enfance ou à l'âge adulte (n=40) et celles ne rapportant pas d'abus sexuel en ce qui concerne la détresse et la fonction sexuelle, l'intensité de la douleur rapportée, ou les symptômes anxieux et dépressifs (Jackowich et al., 2021). De plus, aucune différence significative n'était rapportée quant à la réponse à un traitement multidisciplinaire pour la VP au sein de ces deux groupes.

Plusieurs auteurs soutiennent l'idée que l'expérience de maltraitance à l'enfance viendrait affecter négativement les représentations de soi et des autres, ce qui en retour aurait des conséquences délétères sur le vécu des survivants, incluant dans la sphère de la sexualité (MacIntosh et al., 2020). En effet, les individus ayant vécu de la maltraitance à l'enfance auraient un sens identitaire plus faible, des difficultés de régulation émotionnelle, une perception de soi dévaluée, et des attentes distordues vis-à-vis les relations interpersonnelles, notamment en ce qui a trait à la confiance et à la sécurité, ce qui en retour affecterait leur capacité à profiter d'une vie sexuelle sécuritaire, dégagée et satisfaisante (Bigras et al., 2021; Rosen & Bergeron, 2019).

Traitements

Plusieurs traitements sont disponibles pour traiter la VP. Toutefois, les études réalisées à ce jour pour tester leur efficacité sont peu rigoureuses, faisant en sorte que nos connaissances quant à l'efficacité thérapeutique des différentes modalités de traitement est déficitaire (Bergeron et al., 2015; Goldstein et al., 2016; Mandal et al., 2010). En effet, l'utilisation d'échantillons de

convenance et de petite taille, le manque d'essais cliniques contrôlés et randomisés, et l'absence de suivi des participants une fois les traitements terminés font en sorte que les conclusions quant à l'efficacité des différentes modalités thérapeutiques sont limitées (Bergeron et al., 2020). De plus, peu d'études administrent des mesures en cours de traitement, faisant en sorte que nous en savons peu sur les mécanismes de changement sous-jacents à l'efficacité thérapeutique (Bergeron et al., 2015). Ceci aurait pour conséquence que les recommandations quant au traitement de la VP reposent principalement sur des comités d'experts usant d'une approche prudente et conservatrice plutôt qu'informée et avertie, conseillant généralement l'usage de régimes moins invasifs comme traitements de première ligne (Goldstein et al., 2016).

Traitements médicaux

Plusieurs traitements médicaux sont disponibles pour réduire la douleur chez les femmes souffrant de VP et peuvent être classifiés en trois catégories : les agents topiques, les médications systémiques et les injections.

L'un des traitements les plus prescrits pour le traitement de la VP est la lidocaïne topique – un agent analgésiant venant réduire la sensibilisation des nocicepteurs de façon locale à l'entrée du vestibule vulvaire (Reed et al., 2008). Les résultats concernant l'efficacité de la lidocaïne sont mitigés et son usage comporte des risques d'effets secondaires, faisant en sorte que l'utilisation de la lidocaïne topique comme traitement pour la VP n'est pas recommandée à long terme (Bergeron et al., 2020; Di Biase et al., 2016; Goldstein et al., 2016). Certaines études ont examiné d'autres agents topiques pour réduire la douleur associée à la VP (p.ex., estrogène, gabapentin, capsaicin), mais la plupart de ces études n'incluaient pas de groupes contrôles ou démontraient une efficacité ne dépassant pas celle du placébo (Di Biase et al., 2016). Une étude de traitement non contrôlée impliquant 50 femmes préménopausées a démontré que l'application de crèmes

topiques à base d'estradiol et de testostérone semble réduire la douleur chez les femmes atteintes de VP (Burrows & Goldstein, 2013).

La prise de médication, tel que des antidépresseurs tricycliques ou des anticonvulsivants, agissant de manière systémique, a également été proposée comme traitement visant à réduire la douleur et démontrent des résultats mitigés, où les quelques études à ce sujet sont non-contrôlées ou démontrent une efficacité équivalente au placébo (Leo, 2013; Leo & Dewani, 2013; Reed et al., 2006).

Enfin, il en est de même pour les injections topiques (p. ex., de stéroïdes ou de bupivacaïne, botulinum toxic A), qui, lorsqu'étudiées rigoureusement dans un contexte d'essai clinique randomisé, démontrent des résultats ne dépassant pas l'efficacité du placébo (Bergeron et al., 2020; Goldstein et al., 2016; Landry et al., 2008; Petersen et al., 2009).

Traitements chirurgicaux

Bien que généralement envisagée en dernier recours, la vestibulectomie – une chirurgie visant à retirer les tissus vulvaires douloureux – est le traitement le plus largement étudié et a été démontrée comme un traitement efficace pour réduire la douleur chez les femmes atteintes de VP (Tommola et al., 2010). En effet, de 60% à 90% des femmes ayant recours à la vestibulectomie rapporteraient une diminution significative de leur douleur (Landry et al., 2008; Tommola et al., 2010). Cependant, bien que les études démontrent une diminution marquée de la douleur chez les femmes avec VP, elles ont été réalisées en l'absence d'un groupe contrôle ou ont été menées de façon rétrospective. Seulement une étude contrôlée randomisée démontre que la vestibulectomie serait plus efficace à court terme que le biofeedback ou la thérapie cognitive comportementale (TCC) de groupe, mais ces effets se dissiperaient deux ans et demi après les interventions, où la TCC serait aussi efficace que la chirurgie pour réduire la douleur (Bergeron et al., 2008).

Physiothérapie du plancher pelvien (rééducation périnéale)

La physiothérapie du plancher pelvien est l'un des deux traitements de première ligne recommandés pour traiter la VP (Goldstein et al., 2016). Le but de la physiothérapie est de procéder à la rééducation et à la détente des muscles du plancher pelvien en 1) augmentant la proprioception et la conscience musculaire, 2) encourageant la détente des muscles du plancher pelvien, 3) visant une tonicité normale des muscles, 4) augmentant l'élasticité des tissus vaginaux, 5) procédant à la désensibilisation des tissus douloureux et 6) réduisant la peur et l'anxiété liées à la pénétration (Bergeron et al., 2002). Ce travail se fait par l'entremise du biofeedback, de l'utilisation de dilatateurs, de neurostimulation électrique transcutanée, de touchers manuels, et d'éducation sur la VP. Une revue systématique de la littérature rapporte que la physiothérapie est démontrée comme étant efficace pour réduire la douleur à travers l'ensemble des études examinées (Morin, Carroll, et al., 2017). Un essai clinique randomisé récent auprès de 212 femmes avec la VP a démontré que comparée à la lidocaïne topique, la physiothérapie était plus efficace pour réduire la douleur aux relations sexuelles, améliorer la fonction et la satisfaction sexuelles et diminuer la détresse sexuelle, avec des effets maintenus six mois après la fin du traitement (Morin et al., 2021). Cette dernière étude appuie la recommandation de cette modalité comme traitement de première ligne pour le traitement de la VP (Goldstein et al., 2016), bien qu'il n'en demeure pas moins qu'il y ait à ce jour un très faible nombre d'études rigoureuses incluant des groupes contrôles et un devis d'essai clinique randomisé testant l'efficacité relative de la physiothérapie (Morin, Carroll, et al., 2017).

Traitements psychologiques

La TCC de groupe et individuelle est le seul autre traitement de première ligne recommandé par le comité consultatif international sur la médecine sexuelle (Goldstein et al., 2016). En effet, une méta-analyse a trouvé que les traitements psychologiques pour la douleur vulvo-vaginale étaient aussi efficaces que les traitements médicaux, et ce indépendamment de

l'étiologie du trouble (Flanagan et al., 2015). Ces approches, comparativement aux autres traitements, abordent les multiples dimensions de la VP en plus de la douleur par l'entremise d'interventions ciblant les pensées, les émotions, les comportements et les interactions de couple entourant la VP. En plus de réduire la douleur associée à la VP, elles visent à améliorer le bien-être, la satisfaction et la fonction sexuelles des femmes avec la VP et leurs partenaires, à réduire la détresse psychologique associée à la douleur et à améliorer les habiletés communicationnelles des couples vivant avec la VP.

Des essais cliniques randomisés (ECR) ont démontré que la TCC serait plus efficace que d'autres traitements psychologiques, telle que la thérapie de soutien, pour réduire la douleur et augmenter la fonction sexuelle (Masheb et al., 2009). De plus, certains ECR ont trouvé que la TCC était aussi, sinon plus efficace que certains traitements médicaux pour améliorer la douleur, mais surtout pour améliorer la détresse psychologique et le bien-être sexuel (Bergeron et al., 2001; Bergeron et al., 2016; Bergeron et al., 2008; Bergeron et al., 2021). En effet, un ECR réalisé auprès de 97 femmes avec la VP a démontré que la TCC de groupe serait plus efficace que l'application d'un corticostéroïde topique en ce qui a trait à la réduction de la douleur, l'ajustement psychologique et la fonction sexuelle chez les femmes avec la VP (Bergeron et al., 2016). De plus, une étude longitudinale suggère que les effets de la TCC sur la douleur et la fonction sexuelle perdureraient jusqu'à deux ans et demi suivant la fin du traitement (Bergeron et al., 2008), suggérant que les acquis et bienfaits de la TCC se poursuivraient même une fois le traitement terminé.

Plus récemment, des TCC de troisième vague ont été introduites pour le traitement de la VP en intégrant des interventions basées sur la pleine conscience et l'auto-compassion et ont été démontrées comme étant efficaces pour réduire la douleur au test du coton-tige et le catastrophisme associé à la VP et pour améliorer le sentiment d'auto-efficacité dans la gestion de

la douleur (Brotto et al., 2015). Un essai clinique non-randomisée comparant les effets de la TCC à celle de la TCC basée sur la pleine conscience auprès de 130 femmes avec la VP a trouvé que les deux traitements étaient aussi efficaces pour réduire la douleur, la détresse psychologique associée à la douleur, le catastrophisme, l'évitement des activités pénétratives, et pour améliorer l'acceptation de la douleur (Brotto et al., 2020; Brown et al., 2021b). Cependant, seule l'intervention basée sur la pleine conscience avait des effets bénéfiques sur la compassion pour soi et l'autocritique, suggérant que la TCC de troisième vague pourrait avoir des bénéfices uniques pour les femmes avec la VP.

Considérant la place qu'occupent les facteurs interpersonnels et dyadiques dans le maintien de la VP, une TCC de couple (TCCC) a récemment été élaborée au sein de notre laboratoire de recherche pour examiner l'efficacité des interventions psychologiques en incluant les partenaires des femmes avec la VP (Corsini-Munt, Bergeron, Rosen, Mayrand, et al., 2014). Cette TCCC, adaptée à partir du manuel de traitement de thérapie de groupe de Bergeron et al. (2016), épouse une perspective dyadique dans laquelle les femmes et leurs partenaires sont vus comme étant tous les deux affectés par la douleur et contribuant à son maintien et intègre des interventions abordant les dynamiques interpersonnelles entourant la douleur associée à la VP. Elle inclut des interventions visant à éduquer les femmes et leurs partenaires sur les causes et les facteurs de maintien de la VP, développer les habiletés de communication du couple, rendre la vision de la sexualité du couple plus flexible et réduire l'évitement de la sexualité et développer la compassion et l'empathie l'un envers l'autre. L'efficacité de cette TCCC, en comparaison à l'application quotidienne de lidocaïne topique, a été testée dans un ECR réalisé au sein de notre laboratoire de recherche auprès de 108 couples avec la VP (Bergeron et al., 2021). Les résultats principaux de cet ECR démontrent que la TCCC est aussi efficace que la lidocaïne topique pour réduire la douleur, mais est plus efficace pour réduire le caractère désagréable de la douleur,

l'anxiété et le catastrophisme lié à la douleur et la détresse sexuelle chez les femmes, et est associée de plus grandes satisfactions vis-à-vis le traitement et amélioration subjective de la sexualité chez les deux membres du couple, avec certains de ces effets étant toujours significatifs six mois après la fin du traitement (Bergeron et al., 2021).

Plus récemment, une étude a été lancée sur l'efficacité de la TCC prodiguée en ligne pour le traitement de la vulvodynie dans le but d'accroitre l'accessibilité des soins pour les femmes avec la VP qui nécessitent une attention spécialisée parfois indisponible selon les ressources locales (Engström et al., 2021).

Limites de la littérature sur la VP

À ce jour, la compréhension de l'étiologie, du maintien et du traitement de la VP repose encore largement sur une perspective biomédicale qui fait fi de l'expérience psychologique et interpersonnelle associée à la douleur lors des relations sexuelles et de ses conséquences sur le plan intrapsychique, identitaire, sexuel et relationnel des femmes qui en souffrent (Landry et al., 2008). De plus, bien qu'un effort ait été déployé pour identifier les facteurs psychosociaux associés à la VP (Rosen & Bergeron, 2019; Rosen, Rancourt, et al., 2014), plusieurs études ont limité leur examen aux facteurs interpersonnels proximaux à l'expérience de la VP. En effet, tel qu'illustré par le nombre limité d'études portant sur l'attachement auprès de populations cliniques dans le tableau de l'Annexe A, peu d'entre elles ont examiné les facteurs interpersonnels distaux liés à la VP, alors que ceux-ci constituent les fondements de la construction identitaire et du fonctionnement interpersonnel des individus (Dugal et al., 2016; Mikulincer & Shaver, 2016). Une meilleure compréhension des facteurs psychosociaux distaux associés à la VP permettrait une perspective plus élaborée de l'expérience de la VP chez les femmes et permettrait une vision davantage centrée sur les facteurs constitutifs du

fonctionnement de celles-ci plutôt que centrée sur certains états émotionnels, schémas de pensées ou comportements ponctuels.

En appui à cette idée, peu d'études à ce jour ont utilisé des devis dyadiques pour examiner le fonctionnement des couples qui doivent conjuguer avec la VP ou toute autre problématique sexuelle. Pourtant, la littérature scientifique appuie fortement l'idée selon laquelle le fonctionnement sexuel et conjugal varie de façon interdépendante entre les deux membres d'un couple (Rosen & Bergeron, 2019; Rosen, Rancourt, et al., 2014). Cette entrave limite notre compréhension plus poussée du fonctionnement interpersonnel des couples avec la VP et des contributions de chacun à son maintien dans le temps.

De plus, au meilleur de nos connaissances, aucune étude à ce jour ne s'est penchée sur les associations entre les facteurs interpersonnels distaux et proximaux chez les couples avec la VP, réduisant notre compréhension de la VP à une perspective unidimensionnelle. Pourtant, il est démontré empiriquement que certains facteurs interpersonnels distaux, comme l'attachement, influencent certains facteurs proximaux, notamment les patrons d'interaction des couples (Ben-Naim et al., 2013; Feeney & Fitzgerald, 2019). Une meilleure compréhension des liens entre les facteurs proximaux et distaux permettrait une vision plus complexifiée et holistique de l'expérience des femmes avec la VP et leur partenaire, arrimant le fonctionnement intrapsychique d'un individu à ses corrélats cognitifs, émotionnels et comportementaux contribuant au maintien de la VP.

Une autre limite à la littérature scientifique portant sur la VP constitue le manque d'études à devis longitudinal, limitant notre compréhension de l'évolution de la VP dans le temps. En effet, les conclusions portant sur les facteurs de maintien de la VP proviennent principalement d'inférences tirées d'études transversales, ne permettant pas réellement de statuer sur les conséquences à long terme des facteurs psychosociaux sur le maintien ou l'aggravation de la VP.

D'ailleurs, certaines études identifient des trajectoires de douleur associée à la VP, où certaines femmes voient leur douleur persister dans le temps et d'autres pour qui la douleur se résorbe de façon organique (Pâquet et al., 2019; Reed et al., 2016). Considérant que la VP se résorbe chez certaines femmes et persiste chez d'autres, il apparait d'autant plus important de se pencher sur la compréhension des mécanismes qui contribuent au maintien et à l'aggravation de la VP afin d'en faire des cibles thérapeutiques au sein des traitements offerts pour ces dernières.

Enfin, plusieurs des limites substantielles dans le domaine sont liées aux études ayant trait au traitement de la VP. À ce jour, le manque d'ECR et d'études contrôlées limite les conclusions que nous pouvons tirer de l'efficacité absolue et relative des traitements offerts aux femmes avec la VP, faisant en sorte que les recommandations de traitements reposent sur des consensus d'experts plutôt que sur des assises empiriques bien établies (Goldstein et al., 2016). D'ailleurs, les études portant sur les traitements de la VP actuellement disponibles démontrent de grandes variabilités en termes d'efficacité thérapeutique, avec des taux de succès thérapeutiques variant de 13% à 94%, toutes modalités thérapeutiques confondues, incluant de grandes variabilités à l'intérieur des mêmes modalités thérapeutiques (Landry et al., 2008). Cette variabilité illustre le manque de connaissance important relativement aux mécanismes sous-jacents au traitement de la VP. En ce sens, aucune étude à ce jour n'a examiné les modérateurs thérapeutiques afin d'identifier des variables pouvant potentialiser le succès thérapeutique de certains traitements. Pourtant, comme le soulignent Norcross and Wampold (2011), l'identification des modérateurs thérapeutiques est primordiale dans le fait d'orienter de façon personnalisée les individus vers un traitement adapté à leur présentation clinique et à leurs besoins. Enfin, bien que les enjeux dyadiques entourant la VP aient été soulevés et démontrés empiriquement, aucune étude avant l'ECR dont il est question dans la présente thèse n'a inclus les partenaires des femmes dans le traitement de la VP. L'inclusion des partenaires des femmes avec la VP pourrait augmenter

l'efficacité thérapeutique jusqu'à présent modérée en adressant une dimension généralement omise dans les traitements précédemment examinés, soit la dimension interpersonnelle.

Considérant l'importance des liens d'attachement dans le fonctionnement interpersonnel des individus et des lacunes importantes mentionnées ci-haut quant au manque de connaissances vis-à-vis les facteurs interpersonnels distaux associés à la VP, la présente thèse examine l'expérience des femmes avec la VP et de leur partenaire en utilisant la théorie de l'attachement comme cadre conceptuel.

La théorie de l'attachement

La théorie de l'attachement a initialement été proposée par le chercheur John Bowlby en 1969, dans laquelle il postulait que l'attachement agissait comme un système inné visant à assurer la survie du nourrisson (Bowlby, 1969). Selon ses observations, lorsque les enfants sont confrontés à une menace suscitant un sentiment de peur, d'inquiétude ou de vulnérabilité, ils tendraient à se réfugier auprès d'une figure d'attachement primaire de façon à rétablir un sentiment de sécurité physique ou psychique, promouvant ainsi leur survie. Ainsworth, quant à elle, aurait fait le constat que les enfants diffèreraient dans leur façon de répondre à une menace et déployer des efforts pour restaurer leur sentiment de sécurité (Ainsworth et al., 2015). En effet, selon la disponibilité, la constance et l'adéquation de la réponse de la (ou des) figure(s) d'attachement aux besoins de l'enfant, ce dernier développerait un attachement plus ou moins sécurisé. Bien que de nombreux chercheurs aient tenté de catégoriser différents styles d'attachement (p.ex., Ainsworth et al., 2015; Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987), plusieurs auteurs contemporains soutiennent que l'attachement varierait plutôt selon deux dimensions continues; l'anxiété d'abandon et l'évitement de l'intimité (Fearon & Roisman, 2017; Fraley et al., 2015).

Bien que débattu au sein de la communauté scientifique, un consensus s'installe autour de l'idée que le lien d'attachement développé à l'enfance avec une ou des figures d'attachement primaires tend à persister dans le temps (Fraley, 2002). Les dimensions de l'anxiété d'abandon et d'évitement de l'intimité seraient rattachées à des croyances prototypiques sur soi, sur les autres et sur le monde (Bowlby, 1982) qui tendraient à être modérément stables à l'âge adulte (Sutton, 2019; Waters et al., 2021). La dimension de l'anxiété d'abandon serait associée à une vision dévaluée de soi, où l'un craindrait d'être abandonné ou rejeté en raison de son sentiment de faible valeur personnelle. Quant à elle, la dimension de l'évitement de l'intimité serait associée à une perception négative des autres, où l'un se préviendrait de reposer sur autrui et d'entrer en intimité en raison d'une vision des autres comme étant non fiables et non-dignes de confiance (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994). De grandes variations interindividuelles existent quant au degré d'anxiété d'abandon et d'évitement de l'intimité, où les individus varient de non sécurisés (anxiété et/ou évitement élevé) à sécurisés (faible anxiété et faible évitement dans leur attachement).

En plus d'être associées à l'internalisation de croyances sur soi et sur les autres, les dimensions de l'attachement sont également liées à des stratégies visant à restaurer le sentiment de sécurité interne lorsqu'un individu se sent menacé ou vulnérable, notamment celle d'activer le système d'attachement afin de trouver refuge auprès de sa figure d'attachement (Bowlby, 1969, 1982). Lorsqu'une figure d'attachement se montre disponible à répondre à notre besoin de sécurité ou de réassurance, chercher asile auprès de celle-ci s'avère une stratégie efficace pour réguler son sentiment de menace ou de vulnérabilité. Cependant, lorsque celle-ci est peu encline à offrir son soutien, d'autres stratégies, parfois inefficaces, parfois délétères à long terme, sont déployées afin de restaurer son sentiment de sécurité interne. La dimension de l'anxiété d'abandon est associée à des stratégies d'hyperactivation émotionnelle visant à interpeller la

figure d'attachement de façon à la maintenir à proximité. Celles-ci peuvent prendre la forme de l'expression exagérée de la détresse en vue d'obtenir de l'attention et du soutien, de comportements de poursuite, de *clinging* et d'hypervigilance aux signes de rejet et de menace au lien d'attachement. La dimension de l'évitement de l'intimité est quant à elle plutôt associée à des stratégies de désactivation ou de suppression émotionnelle visant à maintenir les besoins d'attachement en dormance. Ces stratégies incluent de dénier, de façon consciente ou non, la détresse éprouvée dans un contexte menaçant, de prôner une autosuffisance et une autonomie exagérée et d'éviter de dévoiler des aspects de son monde interne, dans le but ultime d'éviter l'engagement relationnel, l'intimité et l'interdépendance (Mikulincer & Shaver, 2003; Mikulincer & Shaver, 2016).

Nombreuses sont les études qui se sont penchées sur les conséquences à court et long-terme de l'insécurité d'attachement. Dans l'ensemble, elles démontrent que celle-ci est généralement associée à davantage de problèmes sur le plan de la santé psychologique (Mikulincer & Shaver, 2012), relationnelle (Li & Chan, 2012; McLeod et al., 2020; Sutton, 2019) et même physique (Meredith et al., 2008; Pietromonaco & Beck, 2019). Considérant que de façon générale, à l'âge adulte, le partenaire de vie devient la figure d'attachement primaire avec lequel une relation de réciprocité s'instaure (Hazan & Shaver, 1987), l'insécurité d'attachement aurait des également des répercussions sur la santé relationnelle des couples. En effet, de nombreuses études réalisées auprès de couples démontrent qu'une plus grande insécurité d'attachement est associée à une plus faible satisfaction conjugale pour soi et pour son partenaire (Candel & Turliuc, 2019), une plus faible intimité relationnelle (Constant et al., 2021; Karantzas et al., 2014), un plus faible engagement de la part des partenaires (Hadden et al., 2014; Mikulincer & Shaver, 2016) et à davantage de conflits et de violence interpersonnelle au sein des couples (Feeney & Fitzgerald, 2019; Spencer et al., 2021; Velotti et al., 2020).

Comme la sexualité est une composante de l'intimité relationnelle chez les couples (Birnbaum, 2010; Birnbaum & Reis, 2019), celle-ci se voit également affectée par l'insécurité d'attachement. La sexualité est une dimension relationnelle intéressante à observer sous la lentille de l'attachement considérant la nature émotionnelle, personnelle et intime de cette expérience. En effet, les individus ayant une représentation positive de soi et des autres (i.e. un attachement sécurisé) sont en mesure de s'engager dans une sexualité satisfaisante où ils se perçoivent comme étant attirants et valorisés par leur partenaire. Ceci ferait de la sexualité une expérience gratifiante, et où ils perçoivent leur partenaire comme authentique et bienveillant, promouvant l'intimité et le plaisir partagé (Mikulincer & Shaver, 2016; Péloquin et al., 2014). En contrepartie, l'inconfort face à l'intimité et la proximité émotionnelle et/ou les préoccupations face à sa valeur personnelle et la peur du rejet peuvent devenir des entraves importantes à une vie sexuelle épanouissante et teintent les motivations des individus à s'engager envers des activités sexuelles. En effet, les personnes plus évitantes de l'intimité tendent à endosser des motivations intra-individuelles (p. ex., plaisir personnel ou orgasme, atteinte d'un statut, rehaussement de l'estime, évitement d'un conflit) pour s'engager dans des activités sexuelles. Les personnes ayant davantage d'anxiété d'abandon, quant à elles, s'engageraient dans des activités sexuelles dans le but de promouvoir l'intimité au sein de leur couple et se rapprocher de leur partenaire, mais également comme moyen d'obtenir une forme de réassurance quant à leur désirabilité et pour éviter le rejet de la part de leur partenaire, les menant par moment à s'engager dans des comportements sexuels à risques pour leur santé psychologique et physique (Birnbaum & Reis, 2019; Davis et al., 2004).

À la lumière de ces informations, il n'est pas surprenant de constater que les individus présentant un plus grand évitement de l'intimité et/ou une plus grande anxiété abandonnique vivent leur sexualité de façon plus conflictuelle. En effet, les études auprès d'échantillons

normatifs et de couples consultant en thérapie conjugale démontrent que ceux-ci rapportent une plus faible satisfaction sexuelle (Brassard et al., 2015; Mark et al., 2018; Péloquin et al., 2014), ont davantage de dysfonctions sexuelles et de fluctuations de désir (Ciocca et al., 2015; Stefanou & McCabe, 2012; Weinstein et al., 2015), ont une plus faible estime de soi sexuelle, davantage d'anxiété sexuelle, une plus faible affirmation de soi sexuelle et davantage de comportements de soumission/conformité sexuelle (Birnbaum & Reis, 2019; Brassard et al., 2015; Impett & Peplau, 2002; Leclerc et al., 2015; Mikulincer & Shaver, 2016). Bien qu'une multitude de modèles théoriques et conceptuels suggèrent que l'insécurité d'attachement pourrait être liée au développement et au maintien de difficultés sexuelles (p. ex., Gewirtz-Meydan & Ofir-Lavee, 2020; Rosen & Bergeron, 2019), très peu d'études à ce jour ont examiné ces associations au sein d'échantillons cliniques d'individus présentant des dysfonctions sexuelles (Ciocca et al., 2015; Lafrenaye-Dugas et al., 2018; Lafrenaye-Dugas et al., 2020).

Position du problème : Attachement dans un contexte de douleur génito-pelvienne

Plusieurs circonstances amènent l'activation du système d'attachement : la menace à l'intégrité physique (douleur, faim) de l'individu, la perception d'une menace qui dépasse les ressources de l'individu, ou la perception d'une menace à la relation avec sa figure d'attachement primaire (Bowlby, 1969, 1973, 1982; Davis et al., 2003; Mikulincer & Shaver, 2003). Suivant cette idée, il serait possible de croire que la douleur génito-pelvienne chez les couples mène à l'activation du système d'attachement. En effet, la présence de la douleur physique lors des relations sexuelles, le manque d'information et de ressources pour la traiter (Donaldson & Meana, 2011; Harlow et al., 2014) et la peur de perdre son partenaire fréquemment rapportée chez les femmes vivant avec cette douleur (Elmerstig et al., 2008; Sheppard et al., 2008) sont trois dimensions qui pourraient amener les individus non sécurisés à déployer des stratégies non adaptatives pour réguler le sentiment de menace et de vulnérabilité que la douleur génito-

pelvienne leur impose. Ces stratégies incluent l'évitement de la sexualité, le catastrophisme, la suppression émotionnelle et une sous- ou surutilisation du système de santé. En appui à cette idée, plusieurs modèles théoriques, tel que le *Modèle Attachement-Diathèse de la Douleur Chronique* (Meredith et al., 2008), le *Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme* (Rosen & Bergeron, 2019), et le *Communal Coping Model* (Thorn et al., 2003), soutiennent que ces stratégies non adaptatives pourraient avoir comme effet de perpétuer la douleur dans le temps et contribuer au maintien des dysfonctions sexuelles. En e

De plus, considérant l'impact majeur de l'attachement sur l'expérience de la sexualité adulte et la nature intime et interpersonnelle du contexte dans lequel la douleur génito-pelvienne survient, il est surprenant que peu d'études se soient intéressées à l'attachement en lien avec cette douleur. Une seule étude contrôlée a permis de démontrer plus largement que comparativement aux femmes sans difficulté sexuelles, les femmes avec des dysfonctions sexuelles ont des scores plus élevés sur les deux dimensions de l'insécurité d'attachement (Ciocca et al., 2015). À ce jour, seulement trois études transversales ont examiné l'attachement chez les femmes avec de la douleur lors des relations sexuelles et leurs partenaires et démontrent des associations avec l'intensité de la douleur, la satisfaction et la fonction sexuelle, l'affirmation de soi sexuelle et l'intimité relationnelle des couples (Bosisio et al., 2019; Granot et al., 2010; Leclerc et al., 2015). Ce maigre corpus d'études constitue un arsenal insuffisant pour dresser un portrait satisfaisant des liens entre l'attachement et la douleur génito-pelvienne.

Objectifs de la thèse

La présente thèse, incluant trois articles empiriques publiés, a comme objectif général d'examiner le rôle de l'attachement dans la douleur génito-pelvienne en épousant des devis scientifiques rigoureux, notamment longitudinal, dyadiques et dans le contexte d'un essai clinique randomisé, afin de mieux saisir les contributions de l'attachement à l'expérience

relationnelle, sexuelle et de traitement des couples confrontés à cette problématique. Les résultats émanant des études présentées dans cette thèse pourront pallier aux lacunes actuelles de la littérature scientifique sur la VP en 1) contribuant à identifier les facteurs psychosociaux qui jouent un rôle dans le maintien de la douleur dans le temps, 2) examinant les relations entre les facteurs de maintien proximaux et distaux de la VP, 3) incluant les partenaires des femmes avec la VP dans l'élaboration d'une compréhension des facteurs influençant le bien-être sexuel des couples et le traitement de la VP, 4) examinant des modérateurs thérapeutiques permettant de déterminer les modalités thérapeutiques à préconiser selon la présentation clinique des femmes avec la VP.

Le premier article de thèse examine de manière longitudinale l'impact de l'attachement des deux membres du couple sur l'intensité de la douleur associée à la VP par l'entremise de ses associations avec le sentiment d'efficacité personnelle dans la gestion de la douleur chez les femmes et leur partenaire amoureux (voir article 1). Cet article comprend un échantillon de 213 couples avec la VP suivis sur une période de 2 ans. Il est attendu qu'un plus faible sentiment d'efficacité personnelle chez les deux membres du couple agira comme médiateur entre une plus grande insécurité d'attachement chez chacun des membres du couple et un degré plus élevé de douleur chez les femmes. L'insécurité d'attachement pourrait diminuer la capacité des femmes et de leur partenaire à se percevoir comme étant outillés pour gérer la douleur associée à la VP dû à une perception de soi comme étant incompétents ou une difficulté à percevoir leur entourage ou les professionnels de la santé comme enclins à les aider. Ceci pourrait en retour promouvoir la passivité et l'évitement de la sexualité, et ainsi le maintien ou l'aggravation de la douleur dans le temps. Le devis longitudinal et les analyses autorégressives croisées permettent de déterminer la direction des associations entre les dimensions d'attachement et le sentiment d'efficacité personnelle des deux partenaires, d'un côté, et la douleur des femmes avec la VP de l'autre. Le

devis dyadique via l'inclusion des partenaires permet de prendre en considération les facteurs sociaux qui sous-tendent l'expérience de la douleur et ainsi fournir un soutien empirique aux modèles interpersonnels de la douleur et des dysfonctions sexuelles. Cet article a été publié dans le périodique *The Journal of Sexual Medicine*.

Le second article de la thèse, utilisant également un devis dyadique, examine les associations entre l'attachement et les réponses des partenaires à la survenue de la douleur liée à la VP lors des relations sexuelles, et ses subséquents liens avec la satisfaction, la fonction et la détresse sexuelles des deux membres du couple (voir article 2). Cet article comprend un échantillon 125 couples intéressés à prendre part à un traitement pour la VP dans deux régions métropolitaines canadiennes. Les stratégies d'hyperactivation et de désactivation émotionnelle associées aux deux dimensions de l'attachement pourraient faire en sorte que les femmes ayant davantage d'insécurité d'attachement perçoivent plus de signes d'hostilité et moins de soutien de la part de leur partenaire. Similairement, on pourrait croire que les partenaires seraient plus enclins à exprimer de la colère ou à être moins disposés à offrir leur soutien s'ils ont des niveaux plus élevés d'insécurité d'attachement. Ceci en retour pourrait avoir un impact sur le bien-être sexuel des deux membres du couple qui font face à la VP. Il est attendu que l'insécurité d'attachement (i.e. niveaux plus élevés d'anxiété d'abandon et/ou d'évitement de l'intimité) chez les femmes soit associée à une perception plus élevée de réponses négatives et plus faible de réponses facilitatrices de la part de leur partenaire, ce qui en retour serait associé à un plus faible bien-être sexuel chez les deux membres du couple. Il est attendu que les partenaires rapportant davantage d'insécurité d'attachement autorapportent davantage de réponses négatives et moins de réponses facilitatrices, ce qui en retour serait associé à un plus faible bien-être sexuel chez les deux membres du couple. Les effets partenaires entre l'attachement et les réponses des partenaires sont examinés de façon exploratoire. Encore une fois, l'usage du devis dyadique

permet de mettre en lumière les processus interpersonnels qui sous-tendent les dysfonctions sexuelles et de mieux saisir les dynamiques de couple en mettant en lien les facteurs proximaux et distaux impliqués dans l'expérience de la douleur génito-pelvienne. Cet article a été publié dans *The Journal of Sex Research.*

Enfin, le troisième article traite de l'attachement et de la maltraitance à l'enfance en tant que variables modératrices du progrès thérapeutique sur le plan du bien-être sexuel (satisfaction, fonction et détresse sexuelles) dans un essai clinique randomisé comparant une thérapie cognitive-comportementale de couple pour la VP à un traitement médical de première ligne couramment prescrit – la lidocaïne topique. Cette étude a été enregistrée en 2014, préalablement à sa réalisation et comprends 108 couples ayant pris part à l'un des deux traitements proposés, partageant un recoupement de 86,4% avec la deuxième étude de la présente thèse (Corsini-Munt, Bergeron, Rosen, Steben, et al., 2014). En effet, l'insécurité d'attachement et la maltraitance à l'enfance sont associées à une plus faible capacité à réguler ses émotions et à davantage de difficulté à se rapprocher de son partenaire. Dans un contexte de thérapie de couple, les femmes avec la VP et un niveau plus élevé d'insécurité d'attachement ou ayant subi davantage de maltraitance à l'enfance pourraient avoir de la difficulté à mettre en pratique les exercices proposés qui exigent aux couples de se dévoiler, se rapprocher émotionnellement et physiquement, et de mettre en pratique des stratégies de régulation émotionnelle de façon à revoir leur conception de la VP. Ainsi, il est attendu que plus les femmes présentent des niveaux élevés d'anxiété d'abandon et/ou d'évitement de l'intimité ou de maltraitance à l'enfance, moins elles bénéficieront des deux modalités thérapeutiques. Il est aussi attendu que l'effet de l'insécurité d'attachement sur l'efficacité thérapeutique soit plus prononcé dans la condition de TCCC que dans la condition de la lidocaïne. L'usage d'un essai clinique randomisé comme devis a comme avantage de pouvoir comparer l'efficacité de deux traitements, et incidemment d'examiner les

effets différentiels de l'attachement et de la maltraitance à l'enfance au sein de ces deux traitements. Ceci permettra, en aval, de contribuer à la littérature sur laquelle les professionnels de la santé peuvent s'appuyer pour choisir un traitement adéquat selon le profil des femmes avec la VP qu'ils rencontrent. Ainsi, les résultats fourniront des données probantes qui serviront à formuler des recommandations cliniques. Cet article est publié dans *The Journal of Sexual Medicine* et est récipiendaire du prix Sandra R. Leiblum 2022 pour le meilleur manuscrit étudiant, décerné par la *Society for Sex Therapy and Research*.

CHAPITRE II: PREMIER ARTICLE

Self-Efficacy Mediates the Attachment-Pain Association in Couples Coping with Provoked Vestibulodynia: A Prospective Study

Charbonneau-Lefebvre, V., Vaillancourt-Morel, M.-P., Brassard, A., Steben, M., et Bergeron, S. (2019). Self-efficacy mediates the attachment-pain association in couples with vulvodynia: A prospective study. *The Journal of Sexual Medicine*, 16(11), 1803-1813. doi: 10.1016/j.jsxm.2019.08.012

L'étudiante a pris part aux étapes suivantes de la réalisation de cette étude : coordinations des suivis avec les participants, conceptualisation, modélisation, analyses statistiques, écriture de l'article comme auteure principale, révision.

Running head**:** ATTACHMENT AND PAIN SELF-EFFICACY IN PVD COUPLES

TITLE:

Self-Efficacy Mediates the Attachment-Pain Association in Couples Coping with Provoked Vestibulodynia: A Prospective Study

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ACKNOWLEDGEMENT:

The authors would like to thank Mylène Desrosiers for her assistance with data collection. This study was supported by a doctoral fellowship from the Fonds de Recherche du Québec awarded to the first author and by a grant from the Canadian Institutes of Health Research (CIHR) to the last author.

Abstract

Background: Attachment influences the way individuals anticipate, react and seek support when faced with chronic pain. Although cross-sectional research indicates that attachment insecurity and pain self-efficacy are associated with pain intensity in chronic pain populations, little is known about their long-term effects on pain, and about the directionality of associations between these constructs. Furthermore, whereas attachment is a relational concept, few studies on genito-pelvic pain have espoused a couples' perspective. **Aim:** Using a prospective dyadic design, the present study aimed to examine the directionality of the associations between attachment dimensions, pain self-efficacy and pain intensity in couples coping with Provoked Vestibulodynia (PVD). A second aim was to test whether pain self-efficacy mediated the attachment-pain association. **Methods:** Two hundred thirteen couples coping with PVD completed self-report questionnaires at baseline (T1) and at a two-year follow-up (T2). **Outcome:** (1) Experiences in Close Relationships – Revised; (2) Painful Intercourse Self-Efficacy Scale; (3) 10-point Numerical Rating Scale for pain intensity. **Results:** Autoregressive cross-lagged models revealed that women's greater attachment anxiety and avoidance at T1 predicted their greater pain intensity at T2. Women's greater attachment anxiety at T1 predicted their poorer pain self-efficacy at T2, and poorer pain self-efficacy in women at T1 predicted their higher pain intensity at T2. A mediation model showed that women's lower pain self-efficacy at T2 fully mediated the association between women's higher attachment anxiety at T1 and their higher pain intensity at T2. Partners' attachment dimensions did not predict their own or women's pain self-efficacy, nor pain intensity. **Clinical Implications:** Results suggest that greater attachment anxiety may contribute to women with PVD's lower confidence that they can manage their pain, which leads to long-term, persistent pain. This study highlights the importance of assessing attachment and pain self-efficacy in women with genito-pelvic pain and to consider interventions targeting these

variables, as they have far-reaching consequences. **Strength & Limitations:** The use of longitudinal and dyadic data informs interpersonal processes and the long-term implications of attachment and pain self-efficacy in PVD. The use of self-report measures may introduce a social desirability and recall bias.

Conclusion: This prospective dyadic study adds to a body of literature on PVD and chronic pain by empirically supporting theoretical models on attachment, pain self-efficacy and persistent pain, and supports the role of psychosocial factors in the adjustment to PVD.

Key words: Vulvodynia, Provoked vestibulodynia, Pain self-efficacy, Chronic pain, Attachment

Introduction

Vulvodynia is an idiopathic chronic pain condition affecting women of all ages.[1] Provoked vestibulodynia (PVD) is thought to be the most frequent cause of vulvodynia and is known to affect approximately 7 to 12% of women in the general population.[1, 2] PVD is characterized by pressure-provoked pain and by sensations of cutting or burning, located at the entrance of the vulvar vestibule.[3] Given that the valued activity with which this pain interferes is sexuality, women and their partners both suffer negative consequences, including lower sexual function and satisfaction, and higher psychological distress.[4, 5] Proximal interpersonal factors, such as negative and solicitous partner responses and partner catastrophizing, are associated with worse PVD symptomatology.[6, 7] One distal interpersonal factor that has received less attention is attachment, known to play a role in the adjustment of individuals with chronic pain (ICPs).

Attachment develops throughout childhood based on the stability and security of the infant-caregiver relationship, and influences needs, behaviors, and cognitions, particularly within intimate relationships in adulthood.[8] It is characterized by two dimensions: attachment-related anxiety (negative representation of the self, fear of abandonment and excessive proximity needs) and attachment-related avoidance (negative representation of others, discomfort with emotional intimacy, excessive self-reliance).[9, 10] Attachment theory provides an interesting framework for understanding adjustment to chronic pain, and consequently to PVD, whereby representations of self as worthy of care and loveable despite pain and representations of others as sources of support may impact pain coping strategies and outcomes.[11, 12] Furthermore, attachment generally influences couples' relationship and sexual adjustment, where more secure couples tend to be more stable, more satisfied in their relationship, and better fitted to offer support to their partner when they are experiencing distress.[13, 14]

Cross-sectional studies to date have yielded inconsistent findings in the associations between attachment and pain in both ICPs and their partners, with some showing links between chronic pain intensity and attachment-related anxiety and avoidance in ICPs,[15] and others showing no associations.[16-18] As for partners' attachment dimensions, one study found that spouses' attachment anxiety was associated with ICPs' pain intensity,[19] while another study reported no association between caregivers' attachment and pain intensity in ICPs.[18] In the context of PVD, only two cross-sectional studies have examined the associations between attachment and pain intensity. Granot, Zisman-Ilani, Ram, Goldstick and Yovell [20] showed that women with PVD had higher levels of attachment avoidance than controls, which was associated with greater pain intensity. Conversely, Leclerc, Bergeron, Brassard, Bélanger, Steben and Lambert [21] reported that attachment-related anxiety and avoidance in women with PVD was not associated with pain intensity.

The Attachment Diathesis Model of Chronic Pain (ADMoCP)[11] suggests that attachment is associated with a number of psychological variables (e.g., appraisal, coping, support seeking) that may influence chronic pain outcomes (e.g., pain intensity, disability, psychological wellbeing), and that the presence of such mediators would explain the discrepancies found in the literature examining the attachment – pain association. One of the potential psychological variables that could mediate the relationship between attachment and pain intensity is pain self-efficacy, which is the confidence that one is capable of coping in a way that can reduce pain.[22] Pain self-efficacy is considered a target process variable in non-medical treatments of chronic pain due to its positive and long-term association with pain intensity, and it is also one of the strongest psychological predictors of disability in ICPs.[23-26] Pain self-efficacy is also a predictor of pain intensity and post-treatment pain intensity following cognitive-behavioral therapy in women with PVD.[27-29] Although few studies espoused a dyadic perspective in studying pain self-

efficacy, one study involving 191 individuals with congestive heart failure and their romantic partners found that partners' confidence in their significant other's ability to manage their heart disease predicted a four year survival rate,[30] suggesting that partners' self-efficacy might also influence adjustment to chronic conditions beyond the effect of one's own self-efficacy. To our knowledge, only one study examined pain self-efficacy in couples coping with PVD using a dyadic perspective. Findings indicated that partners' self-efficacy was significantly correlated with women's pain intensity.[31] As suggested by the Interpersonal Emotion Regulation Model of Women's Sexual Dysfunction, [32] interpersonal processes, including attachment, play a significant role in the adjustment to PVD, as both partners are affected by and contribute to the pain condition.

In fact, attachment dimensions are known to influence the way one copes in the face of threat, such as in the context of chronic pain and, therefore, PVD.[33, 34] It is thought that individuals with greater attachment anxiety have a negative representation of oneself and perceive themselves as being unworthy of love and unable to cope effectively with life stressors.[8] In contrast, individuals with greater attachment avoidance have a negative representation of others, seek less social support and tend to be self-reliant in the face of threat. These attachment dimensions may influence how ICPs perceive their abilities to cope effectively with chronic pain, where anxiously attached individuals may have lower pain self-efficacy than avoidant or securely attached individuals.[17]

To our knowledge, only one cross-sectional study examined the association between attachment and pain self-efficacy in ICPs, and revealed that both attachment anxiety and avoidance were associated with lower pain self-efficacy.[17] This study also showed that attachment avoidance moderated the relationship between pain self-efficacy and pain intensity. Furthermore, in their critical review of studies linking adult attachment with chronic pain,

Meredith, Ownsworth and Strong [11] pointed out that the long-term implications of insecure attachment (i.e., anxiety and/or avoidance) on chronic pain outcomes is yet unknown. Conceptual models posit that attachment and pain self-efficacy are predictors of pain intensity, but this has been strongly criticized as no longitudinal studies have examined the direction of these associations.[11, 22] In fact, some authors suggest that chronic pain could increase attachment insecurity due to patients' fear of being rejected, whereas a cross-sectional study showed that attachment anxiety partially mediated the relationship between pain affect and emotional distress.[35] Moreover, although some authors highlight the importance of including romantic partners in studies linking attachment to chronic pain,[12] few studies have done so, with none involving a prospective design.[19, 21, 36]

The current study goes beyond previous investigations concerning the links between attachment, pain self-efficacy and pain intensity by (a) examining the directionality of associations between attachment, pain self-efficacy and pain intensity using a two-year prospective design, (b) considering both partners' attachment and pain self-efficacy, and (c) testing the mediational role of pain self-efficacy in the association between attachment and pain. We hypothesized that both partners' lower pain self-efficacy would mediate the associations between their greater attachment insecurity (i.e. greater attachment anxiety and/or avoidance) and women's greater pain intensity. The same directionality of the associations was expected for partner effects.

Methods

Participants

Participants were 213 women and their male partners recruited during medical visits to gynaecologists or other health professionals, and through newspaper and online advertisements. The present study was part of a larger longitudinal investigation from which results pertaining to

different variables were published previously. [27, 37] Interested women were screened in person or over the phone for eligibility. If recruited through a medical clinic, women received a formal PVD diagnosis using the cotton-swab test, and if recruited over the phone, women were screened for PVD-like symptomatology, which is a robust method in diagnosing PVD.[38] Inclusion criteria were: (1) subjectively distressing vulvovaginal pain occurring in at least 75% of intercourse attempts and lasting for at least 6 months, (2) pain solely triggered during activities exerting pressure to the vulvar vestibule (e.g., intercourse, tampon insertion), (3) if recruited through a gynaecologist or a general practitioner, moderate to severe pain located at the entrance of the vagina, in at least one of determined vestibular locations during the cotton swab test, and (4) married or cohabitating with a romantic partner for at least 6 months. Exclusion criteria were: (1) lack of clear evidence that vulvar pain is linked to intercourse or pressure applied to the vulvar vestibule, (2) presence of one of the following: major medical or psychiatric illness, active infection, deep dyspareunia, diagnosed vaginismus, dermatologic lesion, or pregnancy, and (3) participants under 18 years of age. Finally, because this study focused on romantic relationship variables, only women in the same relationship at baseline and follow-up were included.

Procedure

Participants gave their written informed consent and received the questionnaires either during their visit to their physician or by mail if recruited through advertisement. Couples were asked to complete the questionnaires individually and to return them by mail. Two years later, couples were invited to participate in a follow-up (T2) following the same instructions as the prior participation. As a compensation, women who completed all questionnaires at baseline (T1) were offered a telephone consultation with a clinical sexologist focusing on general information about PVD and its treatment, and were given a list of PVD specialists in their geographical area.

At T2, women and their partners were each offered a $25 financial compensation. This study was approved by the University of Montreal's Institutional Review Board.

Measures

Attachment. Attachment anxiety and avoidance for both partners were measured using the Experiences in Close Relationships – Revised.[39] The attachment anxiety subscale includes 18 items such as "I worry about being abandoned" and the attachment avoidance subscale comprises 18 items such as "I prefer not to show a partner how I feel deep down". Participants rate their general feeling regarding their current relationship on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), with higher scores indicating greater attachment anxiety or avoidance. This instrument has shown good psychometric properties, with alpha coefficients over .90 and test-retest correlations ranging between .50 and .75.[40] In the current sample, Cronbach's alphas were .89 for attachment anxiety and .86 for attachment avoidance in women at T1 and were, respectively, .89 and .88 at T2. For partners, Cronbach's alphas were .86 for attachment anxiety and .82 for attachment avoidance at T1 and .88 and .87, respectively, at T2.

Pain intensity. Women were asked to estimate their average vulvovaginal pain over the last 6 months using a horizontal Numerical Rating Scale (NRS) ranging from 0 (no pain) to 10 (worst pain ever).[41] This type of scale correlates significantly with other pain intensity measures and its validity is well documented.[42] NRSs are frequently used in assessing vulvovaginal pain [43, 44] and other general chronic pain conditions. [17, 41]

Pain self-efficacy. The Painful Intercourse Self-Efficacy Scale (PISES) was used to assess women and partners' sense of self-efficacy in coping with pain during sexual intercourse. This scale is adapted from the Arthritis Self-Efficacy Scale,[45] which is frequently used in the field of chronic pain. Participants indicate, on a 10-point scale ranging from very uncertain (10) to very certain (100), their perceived ability to engage in sexual activity or to achieve specific

outcomes in pain management. In the present study, Cronbach's alphas for women's pain self-efficacy were .91 at T1 and .95 at T2, and partner's pain self-efficacy Cronbach's alphas were .92 at T1 and .96 at T2.

Statistical analyses

Descriptive and correlational analyses were computed using the Statistical Package for the Social Sciences (SPSS V. 24.0, SPSS, Inc, Chicago, IL) to describe sample characteristics and associations between study variables. Paired sample *t*-tests were used to examine mean differences between women and partners' study variables at T1 and T2, and between T1 and T2.

Autoregressive cross-lagged (ARCL) models were computed using M*plus* version 8.0 [46] to examine the direction of associations between study variables. These models test for the autoregressive effects (i.e., the effect of one variable on itself at a later time point) and cross-lagged effects (i.e., the effect of one variable on another at a later time point). These models were run using path analysis following the Actor-Partner Interdependence Model (APIM) [47] which allows for the examination of the effect of one's independent variable on one's own outcome variables (actor effect), but also one's independent variable on the partner's outcome variables (partner effect), while controlling for the interdependence of the variables between members of the couple.

Then, based on these results, a mediation model was tested using *Mplus* to examine if the associations between women and partners' attachment and pain intensity was mediated by women and partners' pain self-efficacy. The effects on T2 mediators and outcomes were examined while controlling for the same variable at T1. To determine the significance of indirect effects through the mediator, 95% confidence intervals around the estimates were computed using 5000 bootstrapping samples.

Based on most recommended guidelines, overall model fits were tested using several fit indices: the chi-square value, the comparative fit index (CFI), the root–mean-square error of approximation (RMSEA), and the standardized root-mean-square residual (SRMR). Indicators of good fit are a non-significant chi-square value, a CFI value of .90 or higher, a RMSEA and a SRMR values below .08.[48-50] In all models, covariances between variables were added based on inspection of modification indexes until model fit indices were satisfactory. All analyses in M*plus* were computed using the maximum likelihood parameter estimates with standard errors and chi-square test statistics that are robust to non-normality (MLR) and missing data were treated using full information maximum likelihood (FIML).[46]

Results

Sample characteristics

Of the 486 women who met eligibility criteria, 353 completed the questionnaires at baseline (T1). At follow-up (T2), 302 of the baseline women agreed to participate, and 274 women returned their questionnaires, for a retention rate of 77.6%. Of those, 213 were still in a relationship with the same partner as at T1. Main reasons for not participating in follow-up were the impossibility to contact participants (n = 24) and a lack of interest in participating (n = 15). Therefore, the final sample included 213 women and their partners. Independent samples t-tests revealed no significant differences between participants included in the present study and those that were excluded (i.e., withdrew at follow-up or were not with the same partner) on women and partners' age, education, couple's annual income, duration of the relationship, pain duration, pain intensity and pain self-efficacy. Of the 213 women, 52.6% (n = 112) received a PVD diagnosis by a medical practitioner and 47.4% (n = 101) met PVD criteria based on the telephone screening. Women who had been diagnosed by a medical practitioner were significantly younger, 29.77 years versus 34.28, $t(210) = 2.96$, $p = .004$, as were their partners, 32.74 years versus

36.98, $t(181) = 2.44$, $p = .016$. There were no other significant differences on T1 sociodemographic variables and on women and their partners' study variables at T1 and T2. Sociodemographic characteristics of the sample are presented in Table 1.

Description of study variables

Means and standard deviations for women and partners' attachment dimensions, pain self-efficacy and women's pain intensity at T1 and T2 are presented in Table 2. Paired sample *t*-tests between T1 and T2 indicated that pain intensity significantly decreased between T1 and T2, $t(200) = 13.92$, $p < .001$. No significant differences in attachment dimensions were found between T1 and T2 for women and their partners, with the exception of partners' attachment avoidance, which significantly increased between T1 and T2, $t(146) = -2.40$, $p = .018$. A significant increase in pain self-efficacy was found between T1 and T2 for both women, $t(198) = -7.79$, $p < .001$, and their partners, $t(175) = -6.67$, $p < .001$. Paired sample *t*-tests between women and their partners showed that women reported greater pain self-efficacy than their partners at T1 and T2, T1: $t(183) = 2.43$, $p = .016$; T2: $t(172) = 3.34$, $p = .001$. The attachment dimensions at T1 and T2 did not significantly differ between women and their partners.

Zero-order correlations

Correlational analyses were conducted between potential confounding variables and study outcomes. Women and partners' age, length of relationship, sexual intercourse frequency and couples' income were not significantly correlated with women's pain intensity at T2. Women who had received medical treatment between T1 and T2, including medication, did not significantly differ from those who had not on pain self-efficacy and pain intensity at T2. Women's pain duration was significantly but poorly correlated with pain intensity at T2 ($r = .15$, $p = .033$) and with women ($r = -.15$, $p = .032$) and partners' ($r = -.18$, $p = .016$) pain self-efficacy at T2. Women's pain self-efficacy at T2 was significantly correlated with their own age ($r = -.22$,

p = .002), their partner's age (r = -.27, p = .001), and with relationship duration (r = -.18, p = .011), whereas partners' pain self-efficacy at T2 was significantly correlated with their own age (r = -.17, p = .031). Women and partners' age were considered as potential control variables due to their significant association with pain self-efficacy at a correlation greater than 0.20. However, considering the strong correlation between women and partners' age (r = .92, p < .001), only women's age was controlled for in models including self-efficacy as an outcome variable. Correlations between study variables are reported in Table 2.

Autoregressive cross-lagged model between attachment dimensions and pain intensity

An ARCL model was computed to examine whether attachment anxiety and avoidance in both partners at T1 predicted women's pain intensity at T2, or whether pain intensity at T1 predicted attachment dimensions of both partners at T2. Results reported in Table 3 indicated significant autoregressive paths between T1 and T2 for all variables, indicating that a variable at T1 significantly predicted the level of the same variable at T2. Cross-lagged effects revealed that greater attachment anxiety and avoidance in women at T1 significantly predicted their greater pain intensity at T2. This model fit the data well, with satisfactory fit indices: $\chi^2(12) = 13.93$, p = .305; RMSEA = .03, 90% CI [.00, .08]; CFI = .99; SRMR= .02.

Autoregressive cross-lagged model between attachment dimensions and pain self-efficacy

An ARCL model was computed to examine the directionality of associations between attachment dimensions and pain self-efficacy for both partners. Results reported in Table 4 indicated significant autoregressive paths between T1 and T2 for all variables and indicated a significant cross-lagged effect of women's attachment anxiety at T1 on women's pain self-efficacy at T2, indicating that women's greater attachment anxiety significantly predicted their lower pain self-efficacy. The fit indices for this model are satisfactory: $\chi^2(13) = 16.11$, p = .243; RMSEA = .03, 90% CI [.00, .08]; CFI = .99; SRMR= .02.

Autoregressive cross-lagged model between pain self-efficacy and pain intensity

A third ARCL model was computed to examine whether pain self-efficacy predicted pain intensity or vice-versa. Results presented in Table 5 indicated significant autoregressive paths between T1 and T2 for women and their partners' pain self-efficacy, but not for pain intensity. Cross-lagged effects showed that women's greater pain self-efficacy at T1 significantly predicted their lower pain intensity at T2. This model fit the data well, with satisfactory fit indices: $\chi^2(4) = 5.02$, $p = .285$; RMSEA = .04, 90% CI [.00, .11]; CFI = .99; SRMR= .04.

Mediation of attachment dimensions and pain intensity by pain self-efficacy

Results of the previous ARCL models provided sufficient support to pursue analysis with pain self-efficacy as a mediator of the associations between attachment dimensions and pain intensity. Results of the mediation model are presented in Figure 1 and the fit indices of this model are satisfactory: $\chi2(5) = 4.86$, $p = .434$; RMSEA = .00, 90% CI [.00, .09]; CFI = 1.00; SRMR = .02. Bootstrapping analyses indicated that the indirect effect of women's attachment anxiety at T1 on their pain intensity at T2 through women's pain self-efficacy at T2 was significant, $b = .35$, 95% bootstrap CI [.09, .60]. Therefore, women's greater attachment anxiety at T1 predicted their lower pain self-efficacy at T2, which in turn predicted their greater pain intensity at T2. The overall model explained 29.9% of variance in women's pain self-efficacy at T2, 22.0% of partners' pain-self-efficacy at T2 and 44.4% of women's pain intensity at T2.

Discussion

This work contributes to a growing body of research examining the effects of attachment and pain-self efficacy on PVD and extends it by incorporating dyadic and longitudinal perspectives. In line with what was found in previous community-based studies of women with PVD,[51] our results showed a decrease in pain intensity over two years. An increase in pain self-

efficacy was also found in both women and their partners, and may be partially explained by the fact that some women sought treatment between the two time points. Results indicated that both attachment dimensions prospectively predicted pain intensity and that attachment anxiety predicted pain self-efficacy in women with PVD. Attachment anxiety also predicted pain intensity through its effect on pain self-efficacy.

A first model examined the directionality of associations between attachment and women's pain. Findings showed that women's attachment anxiety and avoidance, but not partners' attachment dimensions, predicted pain intensity at the two-year follow-up. This result supports theoretical frameworks suggesting that attachment dimensions in ICPs act as predictors of pain intensity.[11] Attachment avoidance is associated with compulsive self-reliance, poorer social coping, thought suppression and deactivation strategies, such as denial of emotions and attachment needs.[15, 52] These coping strategies serve to conceal a vulnerable side of the self that may be hurt by an unreliable and untrustworthy partner (negative model of others). In the context of PVD, avoidant women may underreport pain and avoid potentially painful sexual experiences. They may over-rely on themselves to solve their pain problem, not seeking help from their partner, and comply with undesired sexual intercourse to fulfill "relational obligations", which could further exacerbate the pain experience.[15, 53] Conversely, women reporting greater attachment anxiety are found to experience hyperactivated responses to stress, greater catastrophizing, hypervigilance and fear of pain, all of which could lead to greater pain intensity in the context of PVD.[16, 54] Anxiously attached women have a negative view of themselves and may experience greater fears that their partner will leave because of their deficient sexuality, which could lead to greater emotional distress, hypervigilance to signs of rejection, pain catastrophizing, and to sexual compliance, all of which may contribute to increase pain intensity.[15, 53, 55]

A second model focused on the relationship between attachment dimensions and pain self-efficacy. Only women's attachment anxiety was associated with their own lower pain self-efficacy, suggesting that women who are high in attachment anxiety have a lower confidence that they can act in ways to reduce their vulvovaginal pain. This supports the ADMoCP,[11] which suggests that anxiously attached ICPs live with the appraisal that they may not be equipped to manage the threat that is chronic pain. The current result is in line with those of a cross-sectional study by Meredith, Strong and Feeney [17] showing that lower pain self-efficacy was predicted by greater attachment anxiety in ICPs, but also by greater attachment avoidance, which was not the case in the present study. As avoidantly attached individuals tend to be more self-reliant,[9, 10] they may be just as inclined to feel confident that they can take charge of their chronic pain problem as securely attached individuals. Furthermore, it may be that in the context of PVD, the intra-individual nature of pain self-efficacy is more related to women's negative representations of themselves (i.e., attachment anxiety) as being sexually defective or unable to cope with pain, as compared to attachment avoidance, which carry the belief that one cannot rely on another for support. Also, anxiously attached women tend to rely on sexuality to seek proximity and to foster intimacy with their romantic partners.[56] Suffering from PVD may limit these women's ability to create such a connection with their partner and may lead them to believe that they are not capable of overcoming their chronic sexual difficulty in a way that could lead to a satisfying sex life, which could contribute to lower pain self-efficacy.

A third model examined the directionality of associations between pain self-efficacy and pain intensity. It was found that women's pain self-efficacy predicted their pain intensity over the course of two years. ICPs with a greater sense of self-efficacy are more likely to mobilize resources and to persist in their effort to alleviate pain, which makes pain-self efficacy one of the most robust predictors of pain intensity.[22, 57] A poorer sense of agency over pain may increase

pain-related distress, leading to aversive physiological arousal and therefore increasing pain sensations.[58]

Finally, we examined whether women's pain self-efficacy acted as a mediator of the association between women's attachment and pain. Results indicated that women's pain self-efficacy fully mediated this relationship, suggesting that women's attachment anxiety affects pain intensity through their lower sexual pain self-efficacy. This is, to our knowledge, the first study to examine self-efficacy as a mediator of the attachment and pain association. There has been much criticism about the lack of longitudinal data in this area, and while a directionality between current variables had been proposed,[11, 17, 28] no study had verified these assumptions. Findings of the present study support the expected directionality that had been previously hypothesized.

While other partner and relationship variables are found to be associated with pain in PVD, partners' attachment did not predict either women's pain self-efficacy or pain intensity over time. Another study showed that male partners' attachment was not associated with experimentally induced pain intensity in their female partners,[59] but, in lung cancer patients, romantic partners' avoidance was found to be associated with greater patient pain intensity.[19] However, this was the first study to examine long-term implications of partners' attachment on couples' adjustment to PVD, and although partners' attachment failed to predict women's pain self-efficacy and pain intensity over time, significant correlations were found between partner variables and women's outcomes in a cross-sectional manner. As posited by the Interpersonal Emotion Regulation Model of Women's Sexual Dysfunction,[32] these cross-sectional associations result suggest that interpersonal processes play a role in couples' adjustment of chronic genito-pelvic pain, but more research is needed to examine this effect across time. As for pain self-efficacy, a study involving PVD couples showed that partners' pain self-efficacy was significantly associated to women's pain intensity,[7] which was also the case in the present study.

Partners' confidence in the fact that the pain is manageable might be reassuring and help women to better regulate pain-related distress, which could reduce pain intensity.[30, 58] Though partners' pain self-efficacy was correlated with women's pain intensity in the present study, it failed to predict pain intensity while controlling for women's pain self-efficacy. The effect of women's pain self-efficacy might overshadow that of partners' due to the strong correlations between both partners' self-efficacy, hence a highly shared variance. The strong intra-individual nature of pain self-efficacy and pain intensity may have led to greater associations between women's attachment, pain self-efficacy and pain, outweighing partners' potential impact on these outcomes. In addition, controlling for stability in a longitudinal autoregressive model attenuates considerably the effect sizes of other predictors, which may have affected the significance of certain partner effects.[60]

This study sheds light on the associations between attachment, pain self-efficacy and pain intensity in PVD couples, and holds a number of strengths. First, the prospective design allowed us to go beyond previous research by considering the long-term implications of attachment and pain self-efficacy on pain intensity, and by examining the directionality of these associations. Moreover, the dyadic nature of the data contributed to a better understanding of relational processes underlying chronic pain conditions, whereby attachment may affect pain intensity through its effect on pain self-efficacy only in women with PVD, and not in their romantic partners. However, results must be interpreted in the context of this study's limitations. The use of self-report measures may have introduced social desirability and recall biases. Additionally, the sample comprised exclusively long-term relationship couples who had remained together over the two-year period. Findings may not be applicable to single women with PVD, and may also be specific to couples who stay together despite the pain. Additionally, gender has been found to play a role in the associations between attachment and pain self-efficacy.[17] Therefore, results

must be interpreted carefully, as they apply only to women with PVD. While the use of autoregressive cross-lagged models partially resolves this issue, the use of two time points for a three variable mediation analysis is a limitation of this study. It would have been preferable to use three time points to fully support the directionality findings. Finally, as the current study was focused on the prospective associations between attachment, pain self-efficacy and pain intensity in couples, we did not address other potentially relevant variables (e.g., catastrophizing, emotion regulation, coping strategies) and how they may influence pain outcomes over time.

Clinically, findings showing that women with PVD's attachment anxiety and pain self-efficacy have long-term implications for their pain intensity highlight the importance of assessing attachment in this population. Cognitive-behavioral therapy may be effective in increasing pain self-efficacy, which in turn may help to reduce pain intensity.[57] Moreover, Kowal, Johnson and Lee [61] advocated for the utility of treatments targeting attachment representations, such as emotion focused therapy, for couples coping with chronic illness, as this type of therapy has been proven to be effective in reducing attachment insecurity and increasing support seeking.[62, 63] In conclusion, future studies should integrate other concepts associated with attachment and pain self-efficacy, such as catastrophizing, support seeking and coping strategies, in order to improve our understanding of psychological and relational factors in PVD. Future studies on PVD should also consider using prospective and dyadic study designs as they may better capture interpersonal processes influencing sexuality across time and between partners.

Acknowledgements

The authors would like to thank Mylène Desrosiers for her assistance with data collection.

Funding

This study was supported by a doctoral fellowship from the Fonds de Recherche du Québec awarded to the first author [grant number 254992] and by a grant from the Canadian Institutes of Health Research (CIHR) [grant number MOP 69063] to the last author.

Conflict of interests

The authors declare that they have no conflict of interest.

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Table 1

Sociodemographic Characteristics of the Sample (*N* = 213 couples)

	Women		Partner	
Characteristics	*M* or %	*SD* or *n*	*M* or %	*SD* or *n*
Age (years)	31.92	11.07	34.80	11.83
Cultural background				
French Canadian	87.79	187	73.24	156
English Canadian	3.76	8	6.57	14
Other	7.99	17	5.64	12
Education (years)	16.20	3.08	15.50	3.45
Couple annual income (CAD$)				
$0 - 19,999	7.98	17	––	––
$20,000 - 39,999	13.62	29	––	––
$40,000 - 59,999	21.12	45	––	––
> $60,000	51.64	110	––	––
Relationship duration (years)	7.47	7.91	––	––
Current relationship status				
Married	24.41	52	––	––
Cohabitating, not married	60.09	128	––	––
Not living together	14.08	30	––	––
Pain duration (years)	5.79	6.26	––	––

Table 2

Means, Standard Deviations, and Correlations for Attachment Dimensions, Pain Self-Efficacy, Pain Intensity for Women and their Partners at T1 and T2

	M (SD)	1	2	3	4	5	6	7	8	9	10	11	12	13
1. W anxiety T1	2.45 (1.00)	—												
2. W anxiety T2	2.46 (0.98)	.62**	—											
3. W avoidance T1	2.43 (0.88)	.44**	.30**	—										
4. W avoidance T2	2.49 (0.91)	.31**	.49**	.69**	—									
5. P anxiety T1	2.28 (0.84)	.28**	.12	.37**	.31**	—								
6. P anxiety T2	2.41 (0.92)	.21*	.26**	.38**	.37**	.70**	—							
7. P avoidance T1	2.33 (0.70)	.21**	.11	.33**	.23**	.48**	.42**	—						
8. P avoidance T2	2.53 (0.82)	.14	.34**	.22**	.30**	.30**	.54**	.53**	—					
9. W self-efficacy T1	61.05 (15.68)	-.18*	-.20**	-.20*	-.14*	-.14	-.08	-.08	-.05	—				
10. W self-efficacy T2	70.69 (18.78)	-.30**	-.32**	-.23**	-.36**	-.16	-.17*	.02	-.04	.43**	—			
11. P self-efficacy T1	57.21 (16.02)	-.21**	-.12	-.19*	-.16*	-.18*	-.09	-.14	-.12	.37**	.34**	—		
12. P self-efficacy T2	66.94 (19.41)	-.16*	-.24**	-.13	-.26**	-.14	-.21**	-.16	-.20**	.34**	.65**	.47**	—	
13. W pain intensity T1	7.11 (1.73)	.01	.10	-.13	-.04	.02	-.03	.02	.03	-.40**	-.20**	-.21**	-.13	—
14. W pain intensity T2	4.29 (2.61)	.28**	.18**	.16*	.23**	.15	.07	-.03	-.03	-.26**	-.66**	-.19*	-.46**	.19**

Note. W = Women. P = Partners. * = $p < .05$. ** = $p < .01$. *** = $p < .001$.

Table 3

Autoregressive Cross-lagged Model between Women and Partners' Attachment Dimensions and Women's Pain Intensity

Effect	Coefficient (SE)	Standardized
Autoregressive effects		
W Anxiety T1 → W Anxiety T2	**0.59 (0.06)*****	**.61**
W Avoidance T1 → W Avoidance T2	**0.71 (0.06)*****	**.69**
P Anxiety T1 → P Anxiety T2	**0.74 (0.07)*****	**.69**
P Avoidance T1 → P Avoidance T2	**0.58 (0.08)*****	**.50**
Pain Intensity T1 → Pain Intensity T2	**0.31 (0.11)****	**.20**
Cross-lagged effects		
Pain Intensity T1 → W Anxiety T2	0.04 (0.04)	.07
Pain Intensity T1 → W Avoidance T2	0.02 (0.03)	.04
Pain Intensity T1 → P Anxiety T2	-0.01 (0.03)	-.02
Pain Intensity T1 → P Avoidance T2	0.01 (0.03)	.03
W Anxiety T1 → Pain Intensity T2	**0.49 (0.21)***	**.19**
W Avoidance T1 → Pain Intensity T2	**0.50 (0.24)***	**.17**
P Anxiety T1 → Pain Intensity T2	0.35 (0.27)	.11
P Avoidance T1 → Pain Intensity T2	-0.62 (0.39)	-.17

Note. Significant effects are bold-faced. W = Women. P = Partners. $^{*} = p < .05$. $^{**} = p < .01$. $^{***} = p < .001$.

Table 4

Autoregressive Cross-lagged Model between Women and Partners' Attachment Dimensions and Pain Self-Efficacy

Effect	Coefficient (SE)	Standardized
Autoregressive effects		
W Anxiety T1 → W Anxiety T2	**0.59 (0.06)*****	**.61**
W Avoidance T1 → W Avoidance T2	**0.71 (0.06)*****	**.68**
P Anxiety T1 → P Anxiety T2	**0.74 (0.06)*****	**.69**
P Avoidance T1 → P Avoidance T2	**0.58 (0.08)*****	**.51**
W Self-Efficacy T1 → W Self-Efficacy T2	**0.37 (0.07)*****	**.32**
P Self-Efficacy T1 → P Self-Efficacy T2	**0.53 (0.08)*****	**.43**
Cross-lagged effects		
W Self-Efficacy T1 → W Anxiety T2	-0.01 (0.00)	-.11
W Self-Efficacy T1 → W Avoidance T2	0.002 (0.00)	.04
W Self-Efficacy T1 → P Anxiety T2	0.000 (0.00)	-.01
W Self-Efficacy T1 → P Avoidance T2	0.002 (0.00)	.04
P Self-Efficacy T1 → W Anxiety T2	0.003 (0.00)	.04
P Self-Efficacy T1 → W Avoidance T2	-0.002 (0.00)	-.04
P Self-Efficacy T1 → P Anxiety T2	0.004 (0.00)	.07
P Self-Efficacy T1 → P Avoidance T2	-0.002 (0.00)	-.04
W Anxiety T1 → W Self-Efficacy T2	**-4.50 (1.22)** ***	**-.24**
W Avoidance T1 → W Self-Efficacy T2	-2.17 (1.50)	-.10
P Anxiety T1 → W Self-Efficacy T2	-1.29 (1.65)	-.06
P Avoidance T1 → W Self-Efficacy T2	4.53 (2.55)	.17
W Anxiety T1 → P Self-Efficacy T2	-0.03 (1.37)	-.01
W Avoidance T1 → P Self-Efficacy T2	-0.83 (1.72)	-.04
P Anxiety T1 → P Self-Efficacy T2	-0.55 (1.94)	-.02
P Avoidance T1 → P Self-Efficacy T2	-1.75 (2.76)	-.06

Note. The effect of women's age on self-efficacy was controlled for in this model. Significant effects are bold-faced. W = Women. P = Partners. * = $p < .05$. ** = $p < .01$. *** = $p < .001$.

Table 5

Autoregressive Cross-lagged Model between Women and Partners' Pain Self-Efficacy and Women's Pain Intensity

Effect	Coefficient (SE)	Standardized
Autoregressive effects		
W Self-Efficacy T1 → W Self-Efficacy T2	**0.48 (0.09)*****	**.41**
P Self-Efficacy T1 → P Self-Efficacy T2	**0.58 (0.08)*****	**.48**
Pain Intensity T1 → Pain Intensity T2	0.15 (0.12)	.10
Cross-lagged effects		
W Self-Efficacy T1 → Pain Intensity T2	**-0.03 (0.01)****	**-.18**
P Self-Efficacy T1 → Pain Intensity T2	-0.02 (0.01)	-.11
Pain Intensity T1 → W Self-Efficacy T2	-0.37 (0.84)	-.04
Pain Intensity T1 → P Self-Efficacy T2	0.14 (0.75)	.01

Note. The effect of women's age on self-efficacy was controlled for in this model. Significant effects are bold-faced. W = Women. P = Partners. $^{*} = p < .05$. $^{**} = p < .01$. $^{***} = p < .001$.

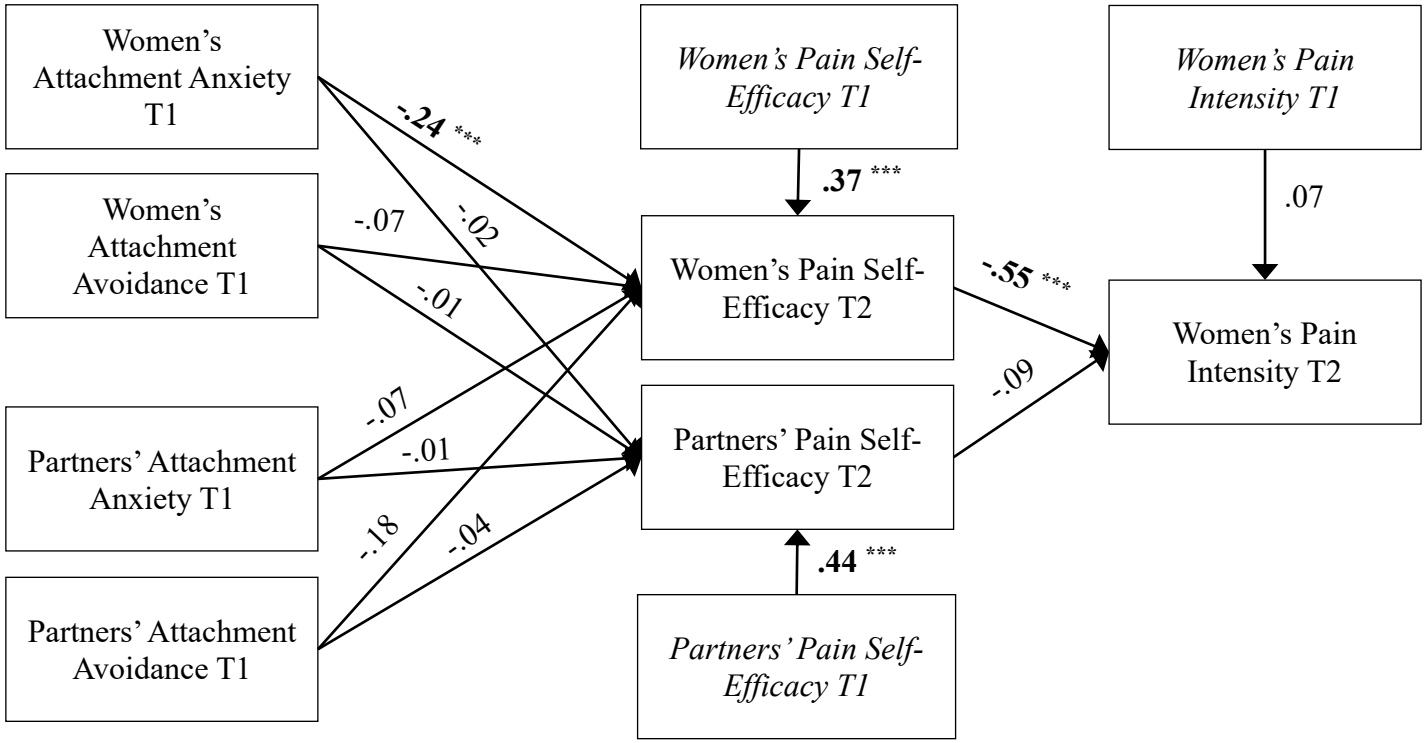

Figure 1. Mediation of women and partners' attachment and pain intensity by pain self-efficacy. Italic text represents same variables at T1 that were controlled for in the model. Direct links between attachment dimensions and pain intensity at T2 were non-significant and are not represented in the figure. The effect of women's age on self-efficacy was controlled for in this model. Regression coefficients are standardized scores. Significant effects are bold-faced. $^{*} = p < .05$. $^{**} = p < .01$. $^{***} = p < .001$.

CHAPITRE III: DEUXIÈME ARTICLE

An Attachment Perspective on Partner Responses to Genito-Pelvic Pain and Their Associations with Relationship and Sexual Outcomes

Charbonneau-Lefebvre, V., Rosen, N. O., Bosisio, M., Vaillancourt-Morel, M.-P., & Bergeron, S. (2021). An Attachment Perspective on Partner Responses to Genito-Pelvic Pain and Their Associations with Relationship and Sexual Outcomes. *The Journal of Sex Research*, 58(2), 235-247. https://doi.org/10.1080/00224499.2020.1761936

L'étudiante a pris part aux étapes suivantes de la réalisation de cette étude : recrutement des participants, évaluation des participants, conceptualisation, modélisation, analyses statistiques, écriture de l'article comme auteure principale, révision.

TITLE:

An Attachment Perspective on Partner Responses to Genito-Pelvic Pain and Their Associations with Relationship and Sexual Outcomes

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ACKNOWLEDGEMENT:

The authors would like to thank Mylène Desrosiers, Marie-Santerre Baillargeon, Myriam Pâquet, Gillian Boudreau, Kate Rancourt and Katherine Petite for their assistance with data collection.

Abstract

Although facilitative and negative partner responses are known to impact couples' adaptation to provoked vestibulodynia (PVD), a chronic genito-pelvic pain condition, it is still unknown what leads individuals to adopt or perceive such adaptative or detrimental behaviors. Attachment influences sexual and relationship adjustment, emotional reactivity, and perceived support in romantic relationships, and as such could be associated with partner responses. This study aimed at examining the mediating role of facilitative and negative partner responses in the associations between attachment and relationship and sexual adjustment in 125 couples coping with PVD. Couples completed self-report questionnaires on attachment, partner responses, sexual satisfaction and distress, and relationship satisfaction. Results indicated that partners' attachment avoidance was negatively associated with facilitative partner-reported responses, which in turn was associated with partners' sexual and relationship satisfaction. Attachment anxiety in women and partners was associated with greater women-perceived negative partner responses, which in turn was associated with women's and partners' greater sexual distress and lower sexual satisfaction, and women's lower relationship satisfaction. Partners' greater attachment anxiety was also associated with greater partner-reported negative responses, which was associated with partners' lower and women's greater relationship satisfaction. Assessing attachment orientations may help clinicians better understand couples' dyadic coping.

Keywords: Attachment, Provoked vestibulodynia, Partner responses, Vulvodynia, Couples

Introduction

Provoked vestibulodynia (PVD) is an idiopathic vulvo-vaginal pain condition affecting approximately 7 to 12% of premenopausal women (Harlow et al., 2014; Harlow & Stewart, 2003). It is characterized by a persistent pressure-provoked pain at the entrance of the vagina often described as a cutting or burning sensation (Bornstein et al., 2016). Given the principal activity with which PVD interferes is sexuality, this pain condition affects both women and their partners. Sexual impairment and distress are often the main reasons for couples to seek treatment (Donaldson & Meana, 2011). For instance, women with PVD report lower sexual satisfaction, poorer sexual function, greater psychological distress and impairments in their relationship functioning, while partners also report lower sexual satisfaction, poorer sexual function, and greater depressive symptoms (see Bergeron, Corsini-Munt, Aerts, Rancourt, & Rosen, 2015 for a review).

In their interpersonal emotion regulation model of women's sexual dysfunction, Rosen and Bergeron (2019) suggested that distal (e.g., attachment, childhood interpersonal trauma, catastrophizing) and proximal (e.g., partner responses, sexual motives) factors may affect both partners' emotional regulation strategies, which in turn may influence the couples' adjustment to PVD. An important and well documented proximal factor in this model is partner responses to painful intercourse. Dyadic cross-sectional and daily diary studies show that facilitative partner responses (e.g., kissing, expressing that intercourse is pleasurable), either perceived by women with PVD or self-reported by their romantic partners, are associated with lower pain intensity, greater sexual function, and greater relationship and sexual satisfaction in women (Rosen, Bergeron, Glowacka, Delisle, & Baxter, 2012; Rosen, Bergeron, Sadikaj, & Delisle, 2015; Rosen, Bergeron, Sadikaj, Glowacka, Delisle, et al., 2014; Rosen, Muise, Bergeron, Delisle, & Baxter, 2015). Conversely, negative partner responses (e.g., expressing anger, ignoring pain

signals), as self-reported by partners or as perceived by women with PVD, are associated with women's greater pain intensity, poorer relationship satisfaction, poorer sexual satisfaction, greater depressive symptoms, and both partners' greater anxiety and poorer sexual function (Rosen, Bergeron, Lambert, & Steben, 2013; Rosen, Bergeron, et al., 2015; Rosen, Bergeron, Sadikaj, Glowacka, Baxter, et al., 2014; Rosen, Bergeron, Sadikaj, Glowacka, Delisle, et al., 2014; Rosen, Muise, et al., 2015).

Although the positive impact of facilitative partner responses and the detrimental effect of negative partner responses on both partners' sexual, relational and psychological adjustment to PVD are well documented, only one study to date has examined their antecedents (Davis, Bergeron, Sadikaj, Corsini-Munt, & Steben, 2015). Current couple treatments for PVD target partner responses and aim to change partners' maladaptive behavioral and affective reactions to pain manifestations that may cause greater distress, greater pain or encourage avoidance of sexual activities (Bergeron, Rosen, & Corsini-Munt, 2017; Corsini-Munt, Bergeron, Rosen, Mayrand, & Delisle, 2014). However, it is unclear why partners display facilitative or negative responses. Also, as perception of support is only moderately related to received support (Haber, Cohen, Lucas, & Baltes, 2007), further investigation as to why and if women hold a biased perception of partner responses is needed. This gap in our understanding of partner responses limits our ability to address these responses appropriately in treatments for couples, as underlying causes for these behaviors are yet unknown and their identification may provide multiple points to target in couples' therapy. In keeping with the interpersonal emotion regulation model of women's sexual dysfunction (Rosen & Bergeron, 2019), a distal factor that may be related to partner responses is attachment. Attachment has been identified as a central factor in romantic relationships and sexual functioning in adulthood, both from theoretical and empirical perspectives (Li & Chan, 2012; Mikulincer & Shaver, 2016; Stefanou & McCabe, 2012). Different attachment needs

influence the way individuals seek security and comfort in contexts of threat, such as in the occurrence of pain, by shaping the interpersonal interactions aimed at upholding a sense of security (Bowlby, 1969). Attachment is known to impact couples' overall relationship and sexual adjustment (Mikulincer & Shaver, 2016), but has also been demonstrated to affect chronic pain adjustment in both individuals and couples (Meredith, Ownsworth, & Strong, 2008; Romeo, Tesio, Castelnuovo, & Castelli, 2017). Therefore, the present study's goal was to examine the dyadic associations between attachment, partner responses to pain, and couples' sexual and relationship adjustment to PVD.

Attachment in adulthood

Attachment develops during childhood through the sensitivity and consistency of care provided by primary caregivers and tends to transpose to adult relationships (Ainsworth, Blehar, Waters, & Wall, 2015; Bowlby, 1973). In the context of romantic relationships, the romantic partner becomes the primary attachment figure to which one turns to for comfort in times of sickness, fear or distress (Hazan & Shaver, 1987). Attachment in adulthood is conceptualized in two continuous dimensions, namely attachment anxiety (or abandonment anxiety) and attachment avoidance (or avoidance of intimacy). Secure attachment represents low fears of intimacy and abandonment (Bartholomew & Horowitz, 1991; Bowlby, 1969). Individuals with higher levels of attachment anxiety tend to hold a negative view of themselves as being unimportant or unworthy of love and proper care. This orientation leads them to exert hyperactivation strategies to maintain the attachment bond, such as seeking intimate and physical proximity as a means of reassurance, staying hypervigilant to cues of rejection, and having excessive emotional reactions when distressed (Cassidy & Kobak, 1988). Individuals with higher levels of attachment avoidance tend to hold a negative view of others as being unresponsive or disappointing, leading them to avoid intimacy and emotional proximity (Bowlby, 1973, 1988). This orientation results

in deactivating strategies in order to obviate the attachment bond, such as denying one's attachment needs, avoiding dependency in close relationships, displaying a self-reliant attitude, and dismissing threatening and attachment-related cues or thoughts (Cassidy & Kobak, 1988).

As demonstrated in many empirical studies, attachment insecurity (i.e. higher levels of attachment avoidance and/or attachment anxiety) and its associated strategies may lead individuals to experience their relationships, and also their sex lives, as being less satisfying, more stressful and more frustrating, as the attachment bond is either superficial or unfulfilling (Beck, Pietromonaco, DeBuse, Powers, & Sayer, 2013; Brassard, Dupuy, Bergeron, & Shaver, 2015; Butzer & Campbell, 2008; Collins, Ford, & Feeney, 2011; Li & Chan, 2012; Mikulincer, Florian, Cowan, & Cowan, 2002; Stefanou & McCabe, 2012). In the context of PVD, the interpersonal emotion regulation model of women's sexual dysfunction stipulates that attachment insecurity may lead to couples' poorer relational, sexual and psychological adjustment, whereby individuals with greater attachment avoidance or anxiety may respectively minimize or exaggerate the threatening aspect of genito-pelvic pain (Rosen & Bergeron, 2019). Indeed, there is evidence showing that attachment insecurity is linked to poorer sexual adjustment in couples affected by PVD, whereby attachment anxiety and avoidance have been associated with greater pain intensity (Charbonneau-Lefebvre, Vaillancourt-Morel, Brassard, Steben, & Bergeron, 2019; Granot, Zisman-Ilani, Ram, Goldstick, & Yovell, 2010), lower sexual function in women, and lower sexual satisfaction in both women and partners (Leclerc et al., 2015). However, no studies to date have examined attachment's associations with PVD couples' relationship satisfaction or subjective sexual distress.

Attachment and caretaking tendencies

Attachment theory suggests that attachment insecurity may lead individuals to exert maladaptative interpersonal responses when distressed (Cassidy & Kobak, 1988). However, no

studies to date have examined the associations between attachment dimensions and partner responses in couples coping with pain during intercourse. In fact, distress expression or support seeking in one partner should lead to the normative activation of empathy, support-providing and caretaking tendencies in the other (Collins et al., 2011), but evidence shows that caretaking tendencies and empathic responding tend to be disrupted in insecurely attached individuals (Collins et al., 2011; Joireman, Needham, & Cummings, 2002; Millings & Walsh, 2009; Péloquin, Brassard, Lafontaine, & Shaver, 2014; Shaver, Mikulincer, & Cassidy, 2019).

Individuals with higher levels of attachment anxiety may get overwhelmed by their partners' distress, as a result of hyperactivating attachment-related strategies, and experience despair, powerlessness and anger, leading them to be emotionally unavailable or overly intrusive in their attempts to offer support (Mikulincer & Shaver, 2005). In contrast, individuals with higher levels of attachment avoidance may minimize their partners' distress or resent and pity their partner for being needy, concordant with greater deactivating attachment-related strategies, which prevents them from responding in a sensitive and adaptative way (Mikulincer & Shaver, 2005). These attachment-related responses to distress may also be relevant to understand partner responses to pain in PVD couples. In fact, individuals with greater attachment insecurity tend to exert maladaptive emotion regulation strategies that generally result in greater interpersonal difficulties (Wei, Vogel, Ku, & Zakalik, 2005) and higher conflict in couples (Pietromonaco, Greenwood, & Barrett, 2004). Individuals with higher levels of attachment anxiety or avoidance may become frustrated or despaired when confronted with their partners' pain-related distress, therefore expressing more negative partner responses. They may also have difficulty becoming empathic and displaying adaptive reassuring responses, namely facilitative responses, in such contexts. Indeed, a study involving 130 married couples showed that attachment insecurity, particularly attachment anxiety, was associated with greater personal distress when couples were

confronted with contextual stressors, which in turn led to poorer support provision towards their partner (Reizer, Ein-Dor, & Possick, 2012). As a greater frequency of negative responses and a lower frequency of facilitative responses may impinge the couples' intimacy and emotional connection, couples may in turn experience their sexuality, and their romantic relationship, as being distressing, unpleasant, and unsatisfying (Payne, Binik, Amsel, & Khalifé, 2005; Rosen & Bergeron, 2019; Rosen et al., 2012).

Attachment and perception of support

Women's attachment insecurity might also be associated with their own perception of their partners' responses, and in turn the couples' sexual and relationship adjustment. In fact, hyperactivating strategies of individuals with higher levels of attachment anxiety involve hypervigilance and a lower threshold to signs of rejection and unavailability (Fraley, Niedenthal, Marks, Brumbaugh, & Vicary, 2006; Mikulincer & Shaver, 2005). In contrast, individuals with higher levels of attachment avoidance may dismiss attachment-related cues and attribute hostile (negative) responses to their partner as a means to distance themselves. These attachment-related strategies may cause women with PVD to perceive greater negative partner responses and fewer facilitative responses from their partners. In fact, the association between attachment insecurity and lower perception of support and responsiveness from a romantic partner is well documented, including in women with PVD (Bosisio, Pâquet, Bois, Rosen, & Bergeron, 2019; Collins & Feeney, 2004b; Collins et al., 2011). An observational study in PVD couples found that higher attachment anxiety in either women or their male partners was associated with lower perceived caring, acceptance and understanding from one's partner during a discussion about PVD (Bosisio et al., 2019). Interestingly, this effect went above and beyond the effect of care, acceptance and understanding as rated by an external observer, suggesting that attachment might impact individuals' perception of support, rather than support as objectively observed.

Attachment and partner responses

Although an interaction between proximal and distal factors has been proposed by Rosen and Bergeron (2019), no studies to date have examined the associations between attachment and partner responses to pain in PVD couples. However, two studies have examined these associations among chronic pain and cancer pain sufferers. Results indicated that greater attachment anxiety was associated with greater perception of negative partner responses (Forsythe, Romano, Jensen, & Thorn, 2012; Gauthier et al., 2012). Nonetheless, these studies assessed only the patients' perception of partner responses rather than both perceived (individual with chronic pain) and reported (by partners) partner responses, and neglected to examine adaptive, facilitative partner responses. Considering that sexuality contributes to the maintenance of the attachment bond (Birnbaum & Reis, 2019), it appears particularly relevant to use a dyadic perspective when examining the association between attachment and partner responses among couples in whom sexuality is impaired by a chronic genito-pelvic pain condition. Also, many have emphasized the importance of examining chronic pain conditions using a dyadic perspective (Cano, Corley, Clark, & Martinez, 2018; Leonard, Cano, & Johansen, 2006; Pence, Cano, Thorn, & Ward, 2006; Rosen & Bergeron, 2019). This is especially true when studying attachment (Mikail, Henderson, & Tasca, 1994; Romeo et al., 2017), as pain influences, and is influenced, by both partners' coping strategies and pain-related behaviors, and ultimately is associated with both individuals' adaptation to pain. Attachment insecurity also interferes with proper caregiving, such as offering reassurance and a "safe haven" for a distressed partner (Collins et al., 2011). Therefore, attachment insecurity might then be negatively associated with more adaptative interpersonal coping strategies, such as using facilitative responses, although this has never been examined in PVD couples, nor in other chronic pain couples. Examining facilitative partner responses in this context might provide a broader view of the impact of attachment insecurity and

of partner responses on couples' adjustment to PVD. Studying both facilitative and negative partner responses may also allow us to orient clinical interventions towards not only detrimental interactions, but also more adaptive behaviors, by either encouraging supportive behaviors from more insecure partners or by enhancing the perception of actual support that may be filtered out due to greater attachment insecurity in women. Finally, although individuals with greater attachment insecurity experience chronic pain as more distressing (Meredith et al., 2008), no study to date has examined the associations between attachment or partner responses and sexual distress.

Study aims and hypotheses

The present study extends previous investigations by 1) examining attachment as a possible predictor of both negative and facilitative partner responses, 2) using a dyadic perspective to examine both partners' attachment as well as women-perceived and partner-reported responses, and 3) examining the mediating role of partner responses in the association between attachment and sexual distress, sexual satisfaction and relationship satisfaction of couples coping with PVD. Specifically, it was expected that (a) greater attachment avoidance and/or anxiety in women would be associated with their greater perception of negative responses and lower perception of facilitative responses and this would in turn be related to greater sexual distress and poorer sexual and relationship satisfaction in both women and partners. Concordantly, (b) greater attachment avoidance and/or anxiety in partners would be associated with their greater self-reported negative and lower self-reported facilitative responses, which would in turn be linked to greater sexual distress and poorer sexual and relationship satisfaction in both partners. As no studies to date have examined the partner effects between attachment dimensions and negative and facilitative partner responses in couples, these were examined in an exploratory manner. However, as partner effects have been previously reported in studies examining partner responses, sexual outcomes

and relationship outcomes in PVD couples (Rosen, Bergeron, Leclerc, Lambert, & Steben, 2010; Rosen, Muise, et al., 2015), positive partner effects for facilitative partner responses and negative partner effects for negative partner responses were expected in the current sample.

Method

Participants

Participants were 122 mixed and three same-sex couples seeking treatment for PVD (n = 125). They were recruited through gynecological and medical clinics and through online advertising on social media. The present study was part of a multicentre randomized clinical trial on the treatment of PVD (Corsini-Munt et al., 2014). Only data from the baseline measures i.e., prior to randomization, were used in the present study. Inclusion criteria for couples were the following: (1) subjectively distressing vulvovaginal pain occurring in at least 80% of intercourse attempts and lasting for at least 6 months, (2) pain triggered exclusively during activities exerting pressure to the vulvar vestibule (e.g., intercourse, tampon insertion), (3) moderate to severe pain located at the entrance of the vagina, subjectively rated as 4 out of 10 during the cotton-swab test performed by a gynaecologist, (4) being married or cohabitating for at least 6 months, or having at least 4 in-person contacts per week, and (5) being sexually active at least once per month, for the past three months. Exclusion criteria were: (1) lack of clear evidence that vulvar pain is linked to intercourse or pressure applied to the vulvar vestibule, (2) presence of one of the following: active vulvo-vaginal infection, deep dyspareunia, diagnosed vaginismus, dermatologic lesion, pregnancy, menopause or pre-menopausal symptoms, (3) taking part in another form of treatment for PVD, (4) being under 18 years of age, or (5) women being over 45 years old, to avoid confounding factors due to potential perimenopausal hormonal changes (Graziottin & Gambini, 2017). Of the 141 couples who met eligibility criteria at phone screening, 7 (5%) withdrew from the study before completing baseline measures, and 9 women (6.4%) were excluded based on

gynecological examination indicating that they did not have PVD. Therefore, the final sample included 125 couples in which women had received a formal PVD diagnosis by a physician using the cotton-swab test.

Procedure

Interested participants were contacted and screened for eligibility by phone. Eligible couples were then invited for an in-person orientation session where they provided informed consent, took part in a structured interview on sociodemographic variables and pain history, and completed baseline questionnaires. Women with PVD symptoms were then given an appointment with a gynaecologist for an assessment of PVD symptomatology. PVD diagnosis was determined using the cotton-swab test, which is a standardized and validated method in which pressure is applied at the entrance of the vulvar vestibule using a cotton swab while women rate their pain intensity from 0 to 10 (Bergeron, Binik, Khalifé, Pagidas, & Glazer, 2001; Goldstein et al., 2016). Women who received a formal PVD diagnosis and their partners were enrolled in the treatment study. Ineligible couples were given a list of vulvar pain specialists in their geographical area. Couples received $30 financial compensation for the completion of baseline questionnaires relevant to the current study. The study was approved by the Centre Hospitalier Universitaire de Montréal (CHUM)'s (13.156) and the IWK Health Centre's (1014930) Institutional Review Boards.

Measures

Attachment. Attachment anxiety and avoidance were measured by using continuous scores, as recommended by Mikulincer and Shaver (2016), using the Experiences in Close Relationships – Short Form (Wei, Russell, Mallinckrodt, & Vogel, 2007). Each subscale includes six items such as "I worry that romantic partners won't care about me as much as I care about them" (attachment anxiety) and "I try to avoid getting too close to my partner" (attachment

avoidance). Participants rated their general feelings regarding their romantic relationships on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), with higher scores indicating greater attachment anxiety or avoidance. This instrument has shown good psychometric properties, with alpha coefficients and test-retest correlations of, respectively, .86 and .82 for attachment anxiety and .88 and .89 for attachment avoidance (Wei et al., 2007). In the current sample, ordinal correlation alphas for women were 0.76 and 0.79 for attachment anxiety and avoidance, respectively, and 0.75 and 0.79 for their romantic partners.

Facilitative partner responses. The facilitative subscale of the Spouse Response Inventory (Schwartz, Jensen, & Romano, 2005) was used to assess facilitative partner responses and was previously adapted to women with PVD and their partners (Rosen, Bergeron, Sadikaj, Glowacka, Baxter, et al., 2014). Six items on a scale of 1 (never) to 6 (very frequently) allowed women to report the frequency at which they perceived facilitating responses (e.g., "hugs and/or kisses me") from their partners (women-perceived facilitative responses) and allowed partners to report the frequency at which they gave facilitating responses (e.g., "express happiness that she is engaging in sexual activities"; partner-reported facilitative responses). Higher scores indicated greater frequency of partner facilitative responses to pain. Cronbach alphas in past studies ranged from .87 to .88 in PVD samples (McNicoll, Corsini-Munt, Rosen, McDuff, & Bergeron, 2016; Rosen et al., 2012) and were .90 for women and .86 for partners in the current sample.

Negative partner responses. The negative subscale of the West Haven-Yale Multidimensional Pain Inventory (Kerns, Turk, & Rudy, 1985) was used to assess negative partner responses to pain. Items assess the frequency of either woman-perceived negative response ("my partner expresses anger at me") or partner-reported negative responses ("I ignore her") on a scale of 1 (never) to 6 (very frequently). Higher scores indicate greater frequency of negative partner responses. The instructions were previously adapted for women with PVD and

their partners to fit the context of PVD and have shown good psychometric properties in PVD samples, with Cronbach's alphas varying between .72 and .84 (Rosen et al., 2013; Rosen, Muise, et al., 2015). In the current sample, Cronbach's alphas were .84 for women and .78 for partners.

Sexual distress. The Female Sexual Distress Scale-Revised is composed of 13 items measuring the frequency at which one experiences sexuality-related distress on a scale of 0 (never) to 4 (always) in the past 30 days. Although developed to measure female sexual distress, this measure has been validated in male samples (Santos-Iglesias, Mohamed, Danko, & Walker, 2018). Items include being "frustrated by your sexual problems" or "worried about sex", where a higher score indicates greater sexual distress. Test-retest correlations ranging from .80 to .92 and internal consistency of $\alpha = .93$ were found in the original validation study (Derogatis, Rosen, Leiblum, Burnett, & Heiman, 2002). In the present sample, Cronbach's alphas were .92 for women and .91 for partners.

Sexual satisfaction. The Global Measure of Sexual Satisfaction (GMSEX) is an instrument including five bi-polar dimensions of sexual satisfaction to which individuals indicate whether their sexuality is good or bad, pleasant or unpleasant, negative or positive, satisfying or unsatisfying, and valuable or worthless, on a 7-point Likert scale. Total scores range from 5 to 35, where a higher score indicates higher levels of sexual satisfaction. Mark, Herbenick, Fortenberry, Sanders, and Reece (2014) found the GMSEX to be the most satisfactory and well validated measure amongst four instruments assessing sexual satisfaction, presenting an alpha of .90 and a test-retest correlation of .84 (Lawrance & Byers, 2010). Cronbach's alphas in the current sample were .91 for women and .87 for partners.

Relationship satisfaction. The Couple Satisfaction Index (CSI-32; (Funk & Rogge, 2007) is a 32-item scale measuring satisfaction with current relationship. Scores to items such as "I still feel a strong connection with my partner" and "How well does your partner meet your needs?"

vary from 0 to 161, where a higher score indicates greater relationship satisfaction. This measure boasts good psychometric properties, with the validation study showing a standardized Cronbach's alpha of .98 (Funk & Rogge, 2007), and with Cronbach's alphas of .97 for both women and partners in the present study.

Statistical Analysis

The Statistical Package for the Social Sciences (SPSS V. 25.0, SPSS, Inc, Chicago, IL) was used to run descriptive and correlational analyses to describe sample characteristics and associations between study variables. Mean differences between women and partners' study variables were examined using paired sample *t*-tests.

Mediation models were then tested in Mplus (Muthén & Muthén, 1998-2015) using path analysis to examine if women-perceived and partner-reported facilitative and negative responses mediated the associations between women's and partners' attachment dimensions and sexual distress, sexual satisfaction and relationship satisfaction, respectively. In order to follow current recommendations regarding statistical power (Kenny, Kashy, & Cook, 2006b; Wolf, Harrington, Clark, & Miller, 2013), the hypotheses were tested in six different models, separated according to partner responses and outcomes (facilitative partner responses: models 1a to 3a; negative partner responses: models 1b to 3b) [Figure 1 near here]. Main analyses were run following the Actor-Partner Interdependence Model (APIM; Kenny, Kashy, & Cook, 2006a). This model accounts for the interdependence between partners and allows for the examination of the effect of one's independent variable on one's own outcome variables (actor effect), but also on the partner's outcome variables (partner effect). The significance of indirect effects was determined by computing a 95% confidence interval around the estimates using 20,000 bootstrapping samples.

Model fits were judged satisfactory when they met recommended guidelines: a non-significant chi-square value, a comparative fit index (CFI) value of .90 or higher, a root–mean-

square error of approximation (RMSEA) and a standardized root-mean-square residual (SRMR) values below .08 (Hooper, Coughlan, & Mullen, 2008; Kline, 2011; McDonald & Ho, 2002). Covariances between variables that were expected to be related were added and are explained in greater detail in the Results section. Mediational models were tested in Mplus version 8.3 with the maximum likelihood parameter estimates with robust standard errors (MLR). The full information maximum likelihood method (FIML) was used to treat missing data (Muthén & Muthén, 1998-2015).

Results

Sample Characteristics

Independent samples *t*-tests revealed no significant differences on sociodemographic (age, education, couple's annual income, duration of the relationship, pain duration) and study variables (perceived and reported facilitative and negative partner responses, relationship and sexual satisfaction, and sexual distress) between participants included in the present study (n = 125) and those that were excluded because they did not meet inclusion criteria (n = 16). Sociodemographic characteristics of the sample are presented in Table 1 [Table 1 near here].

Descriptive Analysis

Means and standard deviations for women's and partners' attachment dimensions, facilitating and negative partner responses, sexual distress and satisfaction, and relationship satisfaction are presented in Table 2. Paired sample *t*-tests indicated that women reported greater attachment anxiety, $t(123) = 3.43$, $p = .001$, greater sexual distress, $t(122) = 13.45$, $p < .001$, and poorer sexual satisfaction, $t(121) = -4.69$, $p < .001$, than their partners. No other significant differences were found between women and partners on attachment avoidance, facilitating and negative responses, and relationship satisfaction.

Zero-Order Correlations

Correlational analyses were conducted between sociodemographic variables and study outcomes to identify potential confounding variables. Significant correlations were found between partners' sexual satisfaction and women's and partners' age (W: r = -.22, p = .01; P: r = -.21, p = .02) and between partners' relationship satisfaction and their own age (r =-.17, p = .05). Relationship duration was significantly associated with partners' sexual distress (r = .28, p < .01), women's sexual satisfaction (r = .31, p < .01), partners' sexual satisfaction (r = .29, p < .01), and partner-reported facilitative responses (r = -.19, p = .04). Women's pain intensity was also significantly correlated with their own sexual distress (r = .29, p = <.01) and with partners' sexual satisfaction (r = -.23, p = .01). No other significant correlations were observed between sociodemographic variables and study variables, including negative partner responses. Relationship duration and pain intensity were controlled for in models including sexual distress and sexual satisfaction, and partners' age was controlled for in models including relationship satisfaction. Correlations between study variables are reported in Table 2 [Table 2 near here].

Indirect dyadic associations between attachment dimensions in both partners and study outcomes via facilitative partner responses

Results of bootstrapping analyses, as reported in Table 3 [Table 3 near here], showed only one significant indirect effect while examining the associations between attachment dimensions, women-perceived and partner-reported facilitative responses and study outcomes, namely sexual distress, sexual satisfaction and relationship satisfaction. While controlling for pain intensity and relationship duration, there was a significant indirect effect of partners' greater attachment avoidance on partners' own lower sexual satisfaction through its association with lower partner-reported facilitative responses (Online supplementary Figure 1a). Fit indices for this model were satisfactory: $\chi 2(7) = 2.82$, p = .90; RMSEA = .00, 90% CI [.00, .05]; CFI = 1.00; SRMR = .02.

Similarly, while controlling for partners' age, there was a significant indirect effect of partners' greater attachment avoidance on partners' own lower relationship satisfaction through its association with lower partner-reported facilitative responses (Online supplementary Figure 2a). Fit indices for this model were satisfactory: $\chi2(4) = 2.06$, $p = .72$; RMSEA = .00, 90% CI [.00, .10]; CFI = 1.00; SRMR = .02.

Finally, the model including sexual distress (Online supplementary Figure 3a) as an outcome provided no significant results, although fit indices were satisfactory for this model; $\chi2(7) = 2.83$, $p = .90$; RMSEA = .00, 90% CI [.00, .05]; CFI = 1.00; SRMR = .02. The percentage of explained variance can be found in Table 4 for models including facilitative partner responses as a mediator.

Indirect dyadic associations between attachment dimensions in both partners and study outcomes via negative partner responses

Results for mediation analysis including negative partner responses as a mediator can be found in Table 4 [Table 4 near here]. In a first model including sexual distress (Online supplementary Figure 1b), while controlling for relationship duration and pain intensity, bootstrap analyses showed a significant indirect effect of women's and partners' greater attachment anxiety on women's and their partner's greater sexual distress through its association with greater woman-perceived negative responses. A significant path was also found between women's greater attachment avoidance and their own greater sexual distress through its association with greater women-perceived negative responses.

Similar results were found in a second set of analyses including sexual satisfaction as an outcome (Online supplementary Figure 2b). While controlling for relationship duration and pain intensity, significant indirect associations through greater women-perceived negative partner

responses were found between women's and partners' greater attachment anxiety and both women's and partners' lower sexual satisfaction.

A final model including relationship satisfaction as an outcome (Online supplementary Figure 3b) showed that, while controlling for partners' age, women's greater attachment anxiety and greater attachment avoidance was associated with greater women-perceived negative responses, which in turn was associated with their own lower relationship satisfaction. Partners' greater attachment anxiety was significantly associated with greater women-perceived negative responses, which in turn was linked to both women's and partners' lower relationship satisfaction. Interestingly, partner's greater attachment anxiety was also associated with greater partner-reported negative responses, which in turn was associated with greater relationship satisfaction in women, and with lower relationship satisfaction in partners. Fit indices for all models were satisfactory: $\chi 2(2\text{-}7) = 0.23$ to 2.87, $p = .57$ to .90; RMSEA = .00, 90% CI [.00, .05 to .08]; CFI = 1.00; SRMR = <.00 to .02. The percentage of variance explained can be found in Table 4 for models including negative partner responses as a mediator.

Discussion

The present study examined attachment's associations with facilitative and negative partner responses, and in turn with couples' sexual distress as well as sexual and relationship satisfaction. Results indicated that when partners reported greater attachment avoidance, they reported engaging in facilitative responses less frequently, which in turn was associated with their own lower sexual and relationship satisfaction. When women or their partners reported greater attachment anxiety, women perceived higher negative partner responses, which was in turn linked to women's and partners' greater sexual distress and lower sexual and relationship satisfaction. Partners who reported greater attachment anxiety also reported greater negative responses, which was linked to their own poorer relationship satisfaction, and surprisingly, to

their female partners' greater relationship satisfaction. Finally, greater attachment avoidance in women was also associated with them perceiving greater negative responses from their partner, which was linked to women's greater sexual distress and poorer relationship satisfaction. The present study provides evidence concerning the interaction between distal and proximal factors, namely attachment and partner responses, as proposed in the interpersonal emotion regulation model of women's sexual dysfunction (Rosen & Bergeron, 2019). It also highlights the contribution of attachment as a key variable in individuals', but also couples', adjustment to PVD via the understanding of its association with partner responses.

Mediating role of facilitative partner responses

Concordant with our hypothesis, we found a significant mediation of lower partner-reported facilitative responses in the association between partners' higher attachment avoidance and their own lower sexual and relationship satisfaction. This finding suggests that romantic partners of women with PVD who have greater fears of intimacy report facilitative responses less frequently, which in turn is associated with their lower sexual and relationship satisfaction. This result is consistent with the current literature on adult attachment, which suggests that individuals with higher levels of attachment avoidance tend to avoid interpersonal contexts that could increase emotional proximity (Collins & Feeney, 2004a) and use distancing strategies to minimize threat-related cues, such as PVD-related pain during intercourse (Rosen & Bergeron, 2019). This may in turn be detrimental to their sexual and relationship satisfaction (Butzer & Campbell, 2008). This effect was not found for sexual distress. This could be explained by the fact that although sexual relationships are more likely to be devoid of emotional intimacy and connection in more avoidantly attached individuals (Birnbaum & Reis, 2019), resulting in less satisfying sexual encounters, the lack of emotional connection during intercourse might not be distressing for them (Butzer & Campbell, 2008; Stefanou & McCabe, 2012).

Facilitative partner responses did not mediate any effects of partners' attachment anxiety, indicating that anxiously attached individuals might not differ from securely attached individuals in terms of facilitative responding. Indeed, this result suggests that, as opposed to individuals with greater attachment avoidance who tend to withdraw when confronted with threat-related cues, more anxiously attached partners try to maintain the attachment bond by engaging in caregiving behaviors and empathic responding. This result is supported by some studies finding that men with greater attachment anxiety express empathic concern towards their female partner (Péloquin, Lafontaine, & Brassard, 2011) and that individuals with greater attachment anxiety do engage in caregiving behaviors, but do so in a distressed and excessive manner (Shaver et al., 2019). In fact, one study found that although excessive caregiving was more frequently reported by more anxiously attached individuals, it did not impact their own or their partners' sexual satisfaction (Péloquin, Brassard, et al., 2014).

Furthermore, no significant association was found between attachment dimensions and outcomes concerning women's perception of their partners' facilitative responses. This may indicate that women with greater attachment insecurity, although more vigilant to overt signs of rejection or relational threat, confirming either their "unlovability" or their beliefs about others' unavailability, might not significantly differ from more securely attached women and still manage to acknowledge signs of support accurately. In fact, an experimental study examining the association between attachment and the interpretations of unambiguous supportive written notes vs. ambiguous supportive written notes from one's partner found that, when rating a message that was unequivocally supportive, insecure individuals did not differ from secure individuals (Collins & Feeney, 2004b). Women with PVD who have a more insecure attachment style might still accurately track facilitating responses, as they are overt and unambiguous demonstrations of support. However, as facilitative partner responses were only poorly correlated between women

and partners, this matter should be examined more thoroughly in future studies. Studies including observational methodologies should examine other potential explanatory mechanisms to better understand how supportive behaviors favor adaptation in couples coping with PVD.

Mediating role of negative partner responses

As hypothesized, women's and partners' greater attachment anxiety was associated with greater women-perceived negative responses, which in turn was associated with women's and partners' greater sexual distress and lower sexual satisfaction and with women's lower relationship satisfaction. These results are consistent with current literature suggesting that individuals with greater attachment anxiety may be hypervigilant to signs of rejection from their partners and have a lower threshold concerning what is perceived as a sign of rejection (Cassidy & Kobak, 1988). Also, individuals with greater fear of abandonment seek to fulfill attachment-related needs such as reassurance and emotional proximity through sexual interactions and may express frustration and anger when they find themselves deprived from such intimacy due to the occurrence of PVD-related pain (Birnbaum & Reis, 2019). Therefore, greater attachment anxiety may lead both partners to express more negative affectivity when confronted with genito-pelvic pain and women to stay hypervigilant to such hostile responses. This pattern, in turn, may be detrimental to the couple's relationship and sexual adjustment (Birnbaum & Reis, 2019).

Women's attachment avoidance was also associated with their greater perception of negative partner responses, which in turn was associated with their greater sexual distress and lower relationship satisfaction. This result is inconsistent with previous studies examining attachment and perceived partner responses in individuals with chronic pain, where only attachment anxiety was significantly associated with perceived negative partner responses (Forsythe et al., 2012; Gauthier et al., 2012). However, it is consistent with theoretical work on attachment that suggest that women with greater attachment avoidance may perceive greater

negative partner responses, as they may hold a biased perception towards stimuli confirming their internal working models whereby others are disappointing and unavailable to offer support (Mikulincer & Shaver, 2016). These results regarding attachment anxiety and avoidance are in line with those of other cross-sectional studies revealing that attachment insecurity was associated with lower perceived and self-reported supportiveness and higher hostile interactions during conflicts. This in turn was linked to lower relationship and sexual satisfaction (Godbout, Dutton, Lussier, & Sabourin, 2009; Karantzas, Feeney, Goncalves, & McCabe, 2014; Kohn et al., 2012; Péloquin, Brassard, et al., 2014; Saavedra, Chapman, & Rogge, 2010), which might also be the case in PVD couples.

Partners' attachment avoidance was unrelated to either women-perceived or partner-reported negative partner responses. This result is consistent with findings suggesting that deactivation strategies may be used in individuals with greater attachment avoidance, which can lead them to avoid showing any signs of affectivity, as this demonstrates emotional attachment (Mikulincer & Shaver, 2003). Although more avoidantly attached partners might experience greater emotional arousal when confronted with PVD, they may not behaviorally differ from more securely attached partners when it comes to negative partner responses, as they might refrain from showing anger or hostility in order to maintain an emotional distance from their female counterpart.

Interestingly, in the model including relationship satisfaction as an outcome, attachment anxiety in partners was associated with greater partner-reported negative responses, which in turn was associated with partners' poorer relationship satisfaction, but women with PVD's greater relationship satisfaction. Partners with greater attachment anxiety may hold a retrospective bias as to their perception of their responses, where negative responses to PVD can be more easily remembered as they have elicited greater distress due to their potentially damaging effect on the

relationship. More anxious individuals also tend to appraise conflicts as more threatening and are prone to catastrophize and ruminate, which could explain why partners reporting higher levels of attachment anxiety report higher levels of negative partner responses (Mikulincer & Shaver, 2011). In fact, studies examining attributional styles show that although individuals who report higher levels of attachment anxiety tend to react in a hostile or punishing way while confronted with a negative relational event, they also tend to seek reassurance and to believe they should be blamed or that they deserve what is happening (Collins, Ford, Guichard, & Allard, 2006). This may have a paradoxical effect, as although partners with greater attachment anxiety report more negative responses to pain during sex, they may also hold a greater fear that their negative responses have negatively impacted their relationship and invest more efforts into fixing the relationship due to their perceived failure. This could in turn lead their female counterparts to perceive such proximity seeking and efforts in relationship building to the point where they experience their relationship as more satisfying. This effect may be specific to relationship satisfaction, rather than for sexual variables, as it may reflect a series of everyday interactions rather than an immediate consequence of negative responses during intercourse. However, as this finding was surprising and runs against our hypothesis, it should be interpreted with caution and be replicated by future studies.

Taken together, results show that negative partner responses as perceived by women with PVD appear to be most related to attachment insecurity and more strongly associated with couples' relationship and sexual outcomes than partner-reported negative responses. This result is concordant with current literature suggesting that it is the perception of support, as opposed to the received support itself, that has a stronger influence on an individual's overall well-being (Haber et al., 2007; Lakey & Orehek, 2011; Uchino, 2009). In line with this finding, other studies on partner responses to PVD have shown that, beyond the impact of partner responses as self-

reported by partners, it was women's perception of facilitative and negative partner responses that was associated with sexual and relationship adjustment (Rosen, Muise, et al., 2015). This may indicate that current psychological treatments for PVD should not only focus on changing partners' responses, but also on women's perception of their partners' behaviors.

Strengths and limitations

The present study sheds light on the interaction between proximal (partner responses) and distal (attachment) factors affecting couples' adjustment to PVD and had a number of strengths. First, the dyadic perspective of this study's design allowed for a better understanding of the relational processes underlying PVD, whereby both partners' attachment orientation may affect the couple's interactions surrounding PVD, which in turn is associated with better or poorer relationship and sexual adjustment. This study is to our knowledge the first to examine attachment in relation to partner responses while using the significant others' perspective on their own reactive behavior to chronic pain or sexuality. Second, this study examined not only the links between attachment and negative reactivity to the experience of pain, but also caretaking tendencies and adaptive responding in such contexts. However, results must be interpreted carefully, accounting for this study's limitations. The use of retrospective and self-report measures may introduce social desirability and recall biases. Also, couples taking part in this study were seeking treatment, including couples' therapy, and might represent a more distressed subsample of couples coping with PVD. Additionally, causality cannot be inferred due to the use of a cross-sectional design. Future studies should replicate the current findings using a longitudinal study design where temporal precedence can be established. Finally, although this study aimed at being inclusive of sexual and gender minorities, the current sample comprised only three same-sex couples which limits the conclusions that can be drawn about possible gender and/or orientation differences in the present findings.

Clinical and theoretical implications

Although a handful of studies have examined caregiving and partner support in relation to attachment and sexual satisfaction in the general population (Péloquin, Bigras, Brassard, & Godbout, 2014; Péloquin, Brassard, et al., 2014), this study is, to the best of the authors' knowledge, the first to examine these variables in a clinical sample of individuals with sexual dysfunction. Theoretically, the present findings lend support to the interpersonal emotion regulation model of women's sexual dysfunction (Rosen & Bergeron, 2019) and suggest that proximal factors such as partner responses may mediate the relation between distal factors and couples' adjustment to PVD. More research is needed to examine the role of emotion regulation in these associations; future studies should include other types of partner responses, such as solicitousness.

From a clinical standpoint, this study shows that attachment insecurity, especially greater attachment anxiety, has implications for couples' adaptation to PVD. As proposed by Hazan and Shaver (1987), one's romantic partner becomes the main source of comfort and support during adulthood and this study demonstrates just how attachment is related to the couples' adaptation when distressed and faced with a relational stressor – genito-pelvic pain. Furthermore, negative partner responses appear to be a more consistent mediator of the association between attachment dimensions and relationship and sexual outcomes than facilitative partner responses. Indeed, greater negative partner responses may be more strongly associated with attachment insecurity due to their higher relationship threat value (Pietromonaco et al., 2004). Lower facilitative responses, although not adaptative, may be less alarming to insecure individuals and therefore may be less likely to impinge the couple's adaptation to PVD. Treatments targeting attachment insecurities and representations, such as emotion focused therapy (Johnson, 2012), might be useful in helping couples express their pain-related fears and engage in more adaptive

interpersonal coping. Although preliminary research has demonstrated that a targeted cognitive-behavioral couple therapy for PVD is effective (Bergeron et al., 2019; Corsini-Munt et al., 2014), future studies should consider integrating an attachment perspective to the treatment of PVD, as attachment insecurity, both in women and in romantic partners, may contribute to the maintenance of genito-pelvic pain (Meredith et al., 2008; Romeo et al., 2017), including PVD (Charbonneau-Lefebvre et al., 2019; Rosen & Bergeron, 2019).

Acknowledgments

The authors would like to thank Mylène Desrosiers, Marie-Santerre Baillargeon, Myriam Pâquet, Gillian Boudreau, Kate Rancourt and Katherine Petite for their assistance with data collection.

Funding

This study was supported by a doctoral fellowship from the Fonds de Recherche du Québec awarded to the first author [grant number 254992] and by a grant from the Canadian Institutes of Health Research (CIHR) [grant number MOP 130298] to Sophie Bergeron and Natalie O. Rosen.

Conflict of interests

The authors declare that they have no conflict of interest.

Data availability statement

The data that support the findings of this study are available from the corresponding author, Veronique Charbonneau-Lefebvre, upon reasonable request.

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Table 1

Sociodemographic Characteristics of the Sample (*N* = 125 couples)

	Women		Partners	
Characteristics	*M* or %	*SD* or *n*	*M* or %	*SD* or *n*
Age (years)	27.17	6.27	29.05	7.60
Cultural background				
French Canadian	40.8	51	32.0	40
English Canadian	33.6	42	40.0	50
Other	25.8	32	28.0	35
Education (years)	17.12	2.24	16.23	2.71
Couple annual income [CAD$]				
$0 - 19,999	20.0	25	––	––
$20,000 - 39,999	20.8	26	––	––
$40,000 - 59,999	12.8	16	––	––
> $60,000	45.6	57	––	––
Did not disclose	0.8	1	––	––
Relationship duration (years)	5.42	4.16	––	––
Current relationship status				
Married	26.4	33	––	––
Cohabitating, not married	51.2	64	––	––
Not living together	22.4	28	––	––
Pain duration (years)	6.49	5.26	––	––

Table 2

Means, Standard Deviations, and Correlations for Attachment Dimensions, Partner Responses and Outcome Variables for Women and their Partners

	M (SD)	1	2	3	4	5	6	7	8	9	10	11	12	13
1. W anxiety	3.51 (1.20)	—												
2. W avoidance	2.01 (0.86)	.12	—											
3. P anxiety	3.02 (1.07)	.05	.12	—										
4. P avoidance	2.11 (0.88)	.21*	.14	.34**	—									
5. W facilitative	4.82 (1.25)	-.16	-.12	-.15	-.15	—								
6. P facilitative	4.90 (1.02)	-.07	-.11	-.04	-.23**	.11	—							
7. W negative	1.62 (0.91)	.20*	.18*	.20*	.01	-.18*	-.04	—						
8. P negative	1.52 (0.69)	.03	-.01	.27**	.13	-.14	-.16	.54**	—					
9. W sexual distress	30.67 (9.52)	.16	.13	.14	.05	-.08	-.03	.32**	.10	—				
10. P sexual distress	16.63 (9.68)	.03	-.04	.35**	.21*	-.04	-.07	.29**	.33**	.28**	—			
11. W sexual sat	22.02 (6.81)	.12	-.22*	-.04	.05	.24*	-.03	-.37**	-.15	-.46**	-.30**	—		
12. P sexual sat	24.94 (6.33)	.04	-.03	-.23*	-.18*	.06	.16	-.36**	-.31**	-.28**	-.69**	.44**	—	
13. W relationship sat	128.95 (22.58)	-.17	-.43**	-.19*	-.19*	.56**	.04	-.32**	-.07	-.16	-.01	.38**	.11	—
14. P relationship sat	127.08 (23.04)	-.22*	-.09	-.33**	-.64**	.19*	.30**	-.26**	-.31**	-.09	-.46**	.18	.49**	.30**

Note. W = Women. P = Partners. Facilitative = Facilitative responses (women-perceived or partner-reported, accordingly). Negative = Negative responses (women-perceived or partner-reported, accordingly). Sat = Satisfaction. * = $p < .05$. ** = $p < .01$

Table 3

Explained Variance and Indirect Associations Between Attachment and Outcome Variables Through Facilitative Partner Responses

Indirect effect via:	W-perceived facilitative responses	P-reported facilitative responses
	b [95% CI]	*b* [95% CI]
Model 1a: Sexual distress		
W anxiety → W sexual distress	.03 [-.13, .34]	<.01 [-.13, .26]
W avoidance → W sexual distress	.02 [-.12, .44]	.06 [-.15, .66]
P anxiety → W sexual distress	.02 [-.12, .33]	-.02 [-.45, .11]
P avoidance → W sexual distress	.02 [-.13, .45]	.14 [-.41, .79]
W anxiety → P sexual distress	-.03 [-.29, .16]	<.01 [-.10, .24]
W avoidance → P sexual distress	-.02 [-.44, .13]	.07 [-.10, .66]
P anxiety → P sexual distress	-.02 [-.32, .13]	-.03 [-.37, .09]
P avoidance → P sexual distress	-.02 [-.44, .14]	.16 [-.21, .78]
Model 2a: Sexual satisfaction		
W anxiety → W sexual satisfaction	-.19 [-.59, <.01]	<.01 [-.07, .13]
W avoidance → W sexual satisfaction	-.15 [-.75, .11]	.02 [-.08, .36]
P anxiety → W sexual satisfaction	-.17 [-.57, .07]	-.01 [-.23, .06]
P avoidance → W sexual satisfaction	-.14 [-.77, .18]	.06 [-.20, .49]
W anxiety → P sexual satisfaction	>-.01 [-.21, .10]	-.01 [-.25, .14]
W avoidance → P sexual satisfaction	>-.01 [-.26, .11]	-.12 [-.58, .10]
P anxiety → P sexual satisfaction	>-.01 [-.21, .10]	.05 [-.16, .32]
P avoidance → P sexual satisfaction	>-.01 [-.26, .12]	**-.28 [-.80, -.03]**
Model 3a: Relationship satisfaction		
W anxiety → W relationship satisfaction	-1.23 [-3.05, .12]	.04 [-.20, .60]
W avoidance → W relationship satisfaction	-1.01 [-4.56, .89]	.14 [-.20, 1.45]
P anxiety → W relationship satisfaction	-1.17 [-3.15, .55]	-.08 [-.93, .19]
P avoidance → W relationship satisfaction	-.92 [-4.33, 1.25]	.44 [-.33, 1.92]
W anxiety → P relationship satisfaction	-.17 [-.87, .11]	-.07 [-.72, .45]
W avoidance → P relationship satisfaction	-.14 [-1.09, .15]	-.29 [-1.73, .37]
P anxiety → P relationship satisfaction	-.16 [-.97, .12]	.17 [-.39, 1.20]
P avoidance → P relationship satisfaction	-.13 [-1.33, .17]	**-.90 [-2.74, -.06]**
	% of explained variance	
W-perceived facilitative responses	5.8	
P-reported facilitative responses	9.1	
W sexual distress	14.0	
P sexual distress	25.2	
W sexual satisfaction	24.0	
P sexual satisfaction	23.6	
W relationship satisfaction	46.3	
P relationship satisfaction	47.4	

Note. Significant effects are bold faced. W = Women. P = Partners.

Table 4

Explained Variance and Indirect Associations Between Attachment and Outcome Variables Through Negative Partner Responses

Indirect effect via:	W-perceived negative responses	P-reported negative responses
	b [95% CI]	*b* [95% CI]
Model 1b: Sexual distress		
W anxiety → W sexual distress	**.53 [.11, 1.28]**	-.02 [-44, .15]
W avoidance → W sexual distress	**.45 [<.01, 1.37]**	.07 [-.13, .67]
P anxiety → W sexual distress	**.55 [.11, 1.31]**	-.26 [-1.12, .22]
P avoidance → W sexual distress	-.37 [-1.17, .11]	-.05 [-.74, .14]
W anxiety → P sexual distress	**.27 [.01, .72]**	.03 [-.16, .40]
W avoidance → P sexual distress	.23 [-.01, .79]	-.08 [-.64, .12]
P anxiety → P sexual distress	**.28 [<.01, .80]**	.33 [-.05, .96]
P avoidance → P sexual distress	-.19 [-.72, .05]	.07 [-.17, .69]
Model 2b: Sexual satisfaction		
W anxiety → W sexual satisfaction	**-.47 [-.98, -.10]**	<.01 [-.08, .19]
W avoidance → W sexual satisfaction	-.41 [-1.04, .03]	-.02 [-.30, .08]
P anxiety → W sexual satisfaction	**-.50 [-1.04, -.12]**	.08 [-.17, .57]
P avoidance → W sexual satisfaction	.34 [-.13, .92]	.02 [-.09, .36]
W anxiety → P sexual satisfaction	**-.34 [-.84, -.05]**	-.01 [-.20, .08]
W avoidance → P sexual satisfaction	-.29 [-.85, <.01]	.03 [-.06, .32]
P anxiety → P sexual satisfaction	**-.36 [-.87, -.06]**	-.13 [-.51, .15]
P avoidance → P sexual satisfaction	.24 [-.05, .76]	-.03 [-.33, .08]
Model 3b: Relationship satisfaction		
W anxiety → W relationship satisfaction	**-1.14 [-2.87, -.15]**	.03 [-.40, .67]
W avoidance → W relationship satisfaction	**-1.16 [-3.10, -.04]**	-.14 [-1.07, .31]
P anxiety → W relationship satisfaction	**-1.42 [-3.34, -.32]**	**.72 [<.01, 2.05]**
P avoidance → W relationship satisfaction	1.00 [-.17, 2.99]	0.13 [-.39, 1.30]
W anxiety → P relationship satisfaction	-.57 [-1.8, <.01]	-.03 [-.67, .53]
W avoidance → P relationship satisfaction	-.58 [-2.03, .01]	.16 [-.45, 1.17]
P anxiety → P relationship satisfaction	**-.71 [-2.04, -.01]**	**-.80 [-2.12, -.06]**
P avoidance → P relationship satisfaction	.51 [-.07, 1.86]	-.14 [-1.21, .55]
	% of explained variance	
W-perceived negative responses	12.9	
P-reported negative responses	8.9	
W sexual distress	19.2	
P sexual distress	30.5	
W sexual satisfaction	28.8	
P sexual satisfaction	30.9	
W relationship satisfaction	28.4	
P relationship satisfaction	50.6	

Note. Significant effects are bold faced. W = Women. P = Partners.

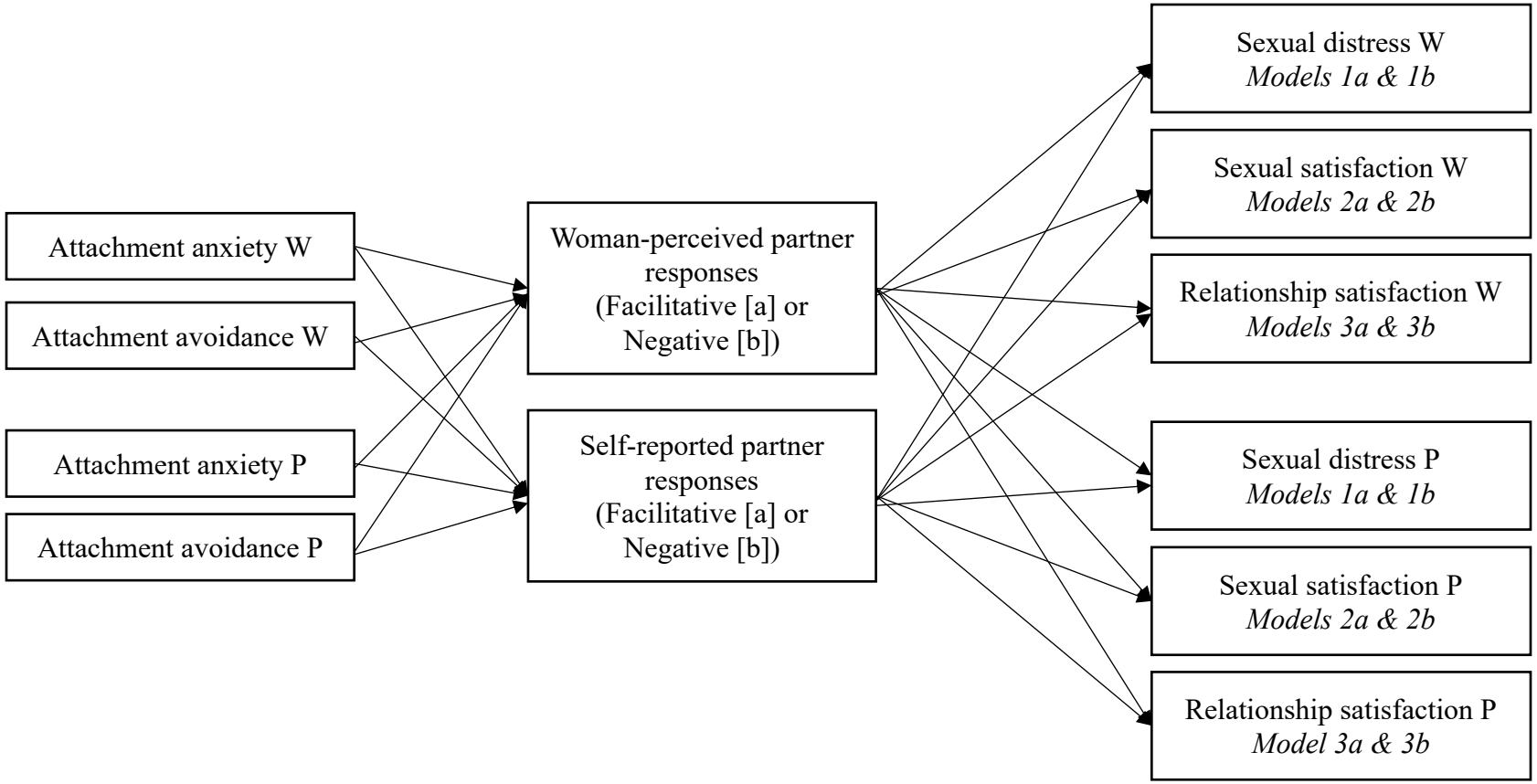
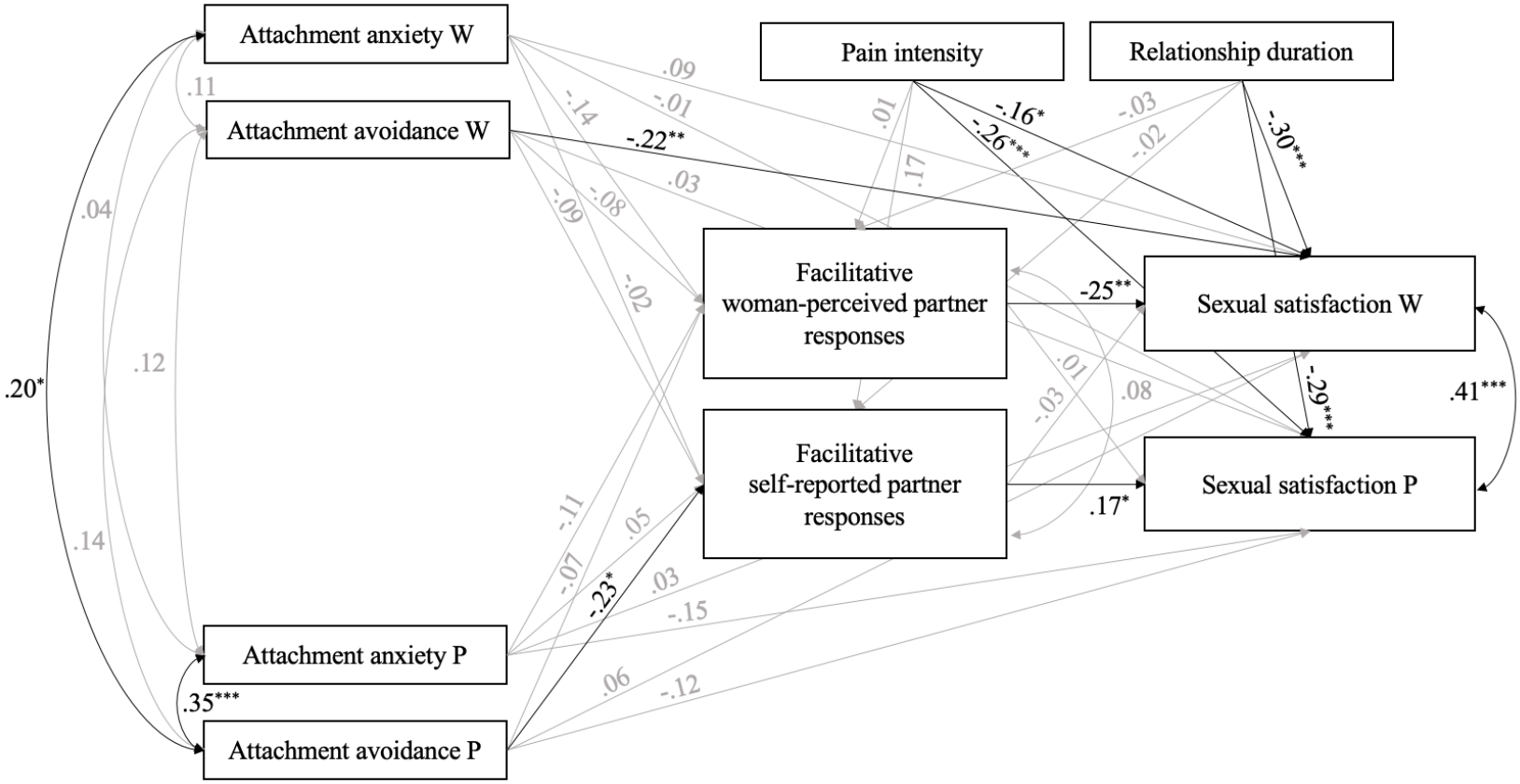
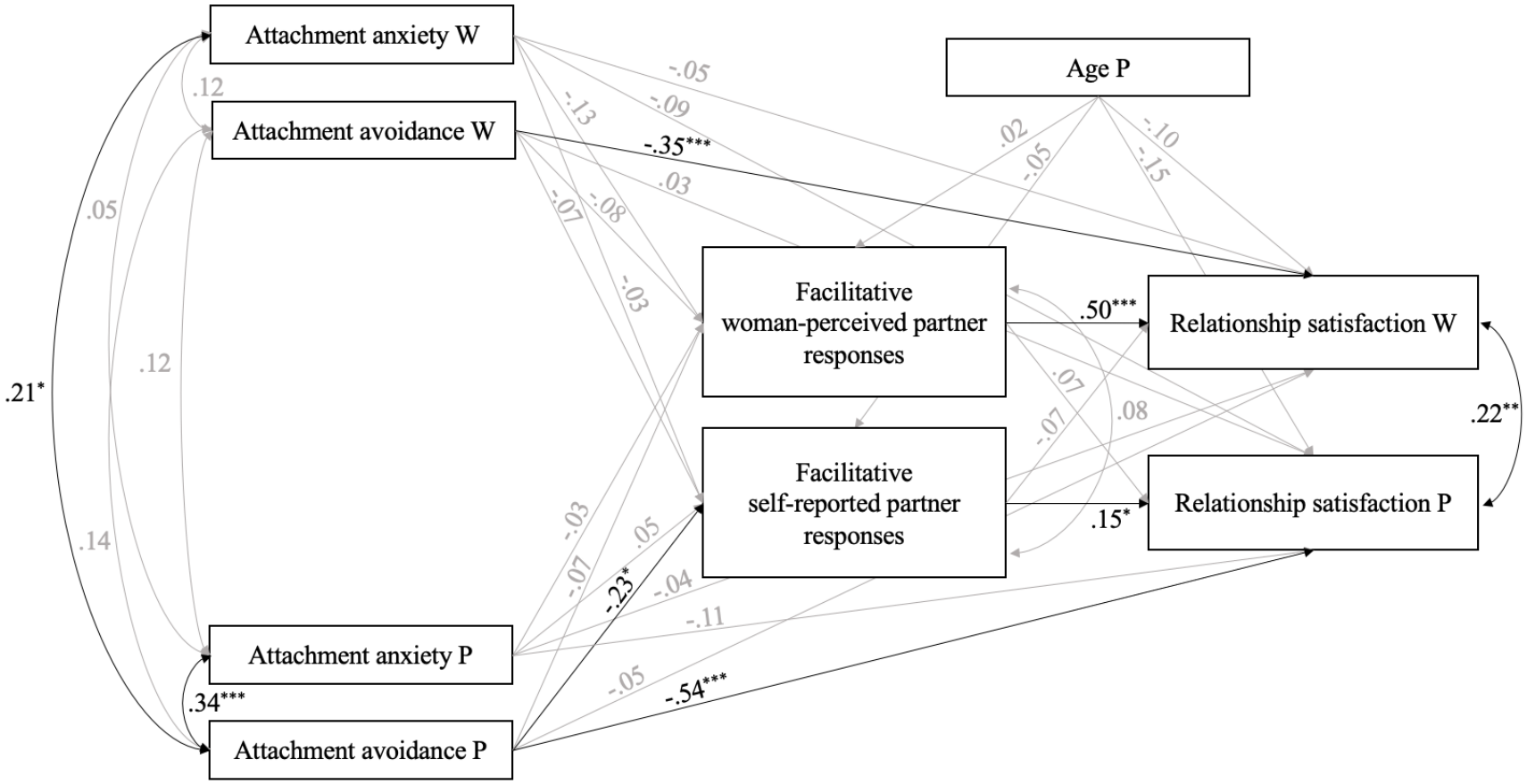


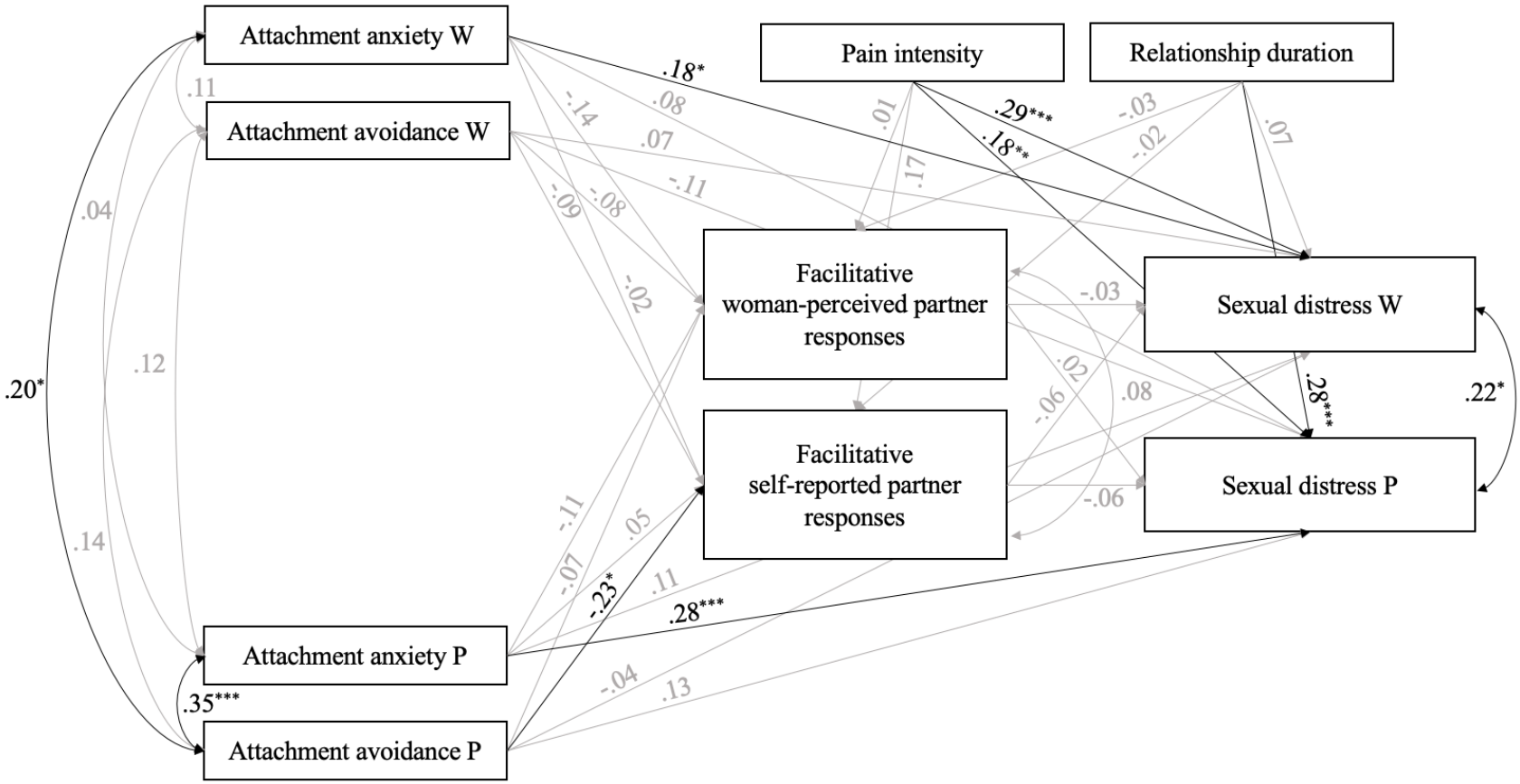
Figure 1. Summary of models examining partner responses as mediators of the associations between attachment dimensions and study outcomes. W = women with PVD. P = partners of women with PVD.



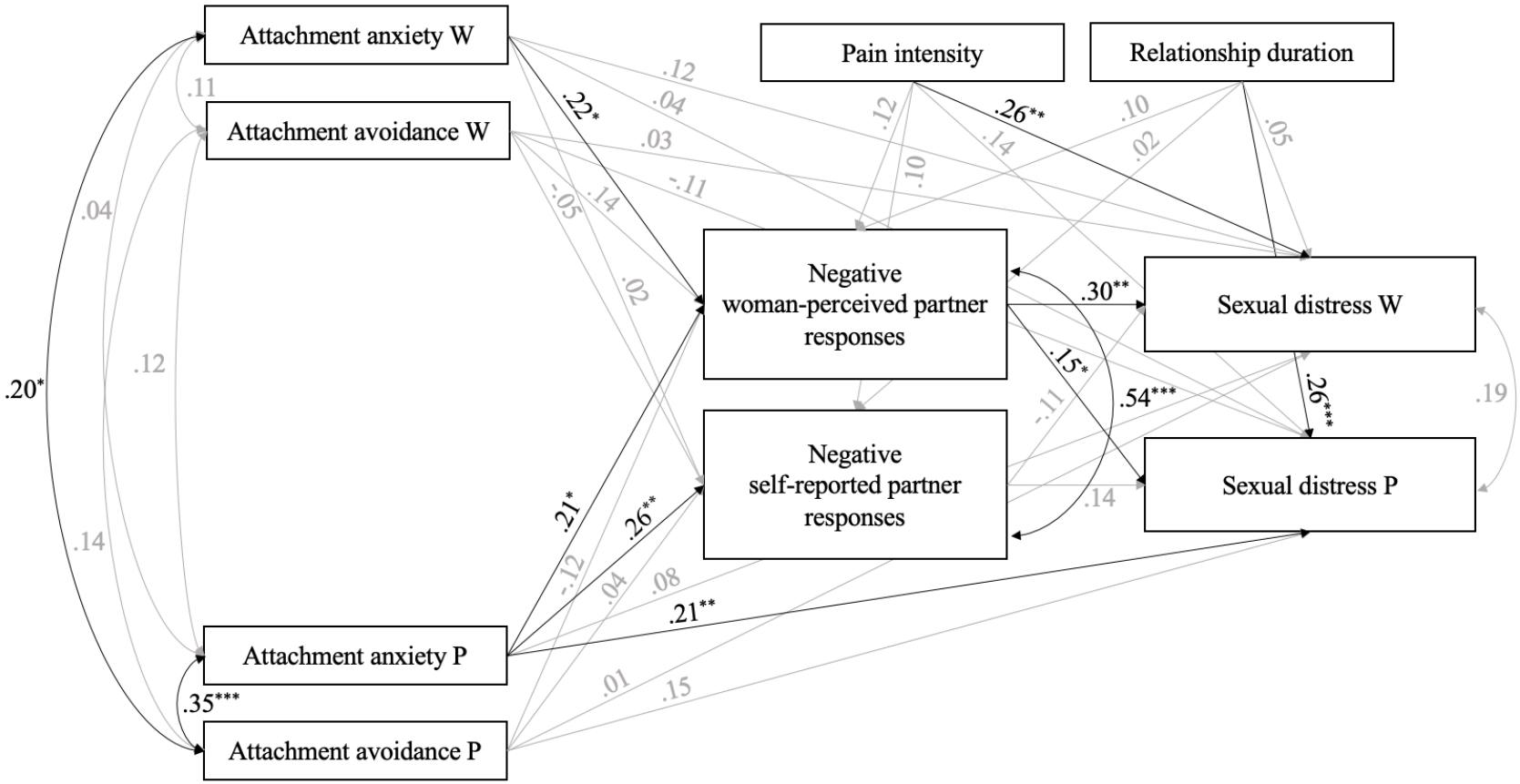
Online Supplementary Figure 1a. Facilitative partner responses as mediators of the association between attachment dimensions and sexual satisfaction. W = women with PVD. P = romantic partners of women with PVD. Covariances between attachment dimensions and control variables were not presented in the model to enhance visual presentation. Regression coefficients are standardized scores. * = $p \leq .05$. ** = $p \leq .01$. *** = $p \leq .001$. Non-significant results are presented in gray.



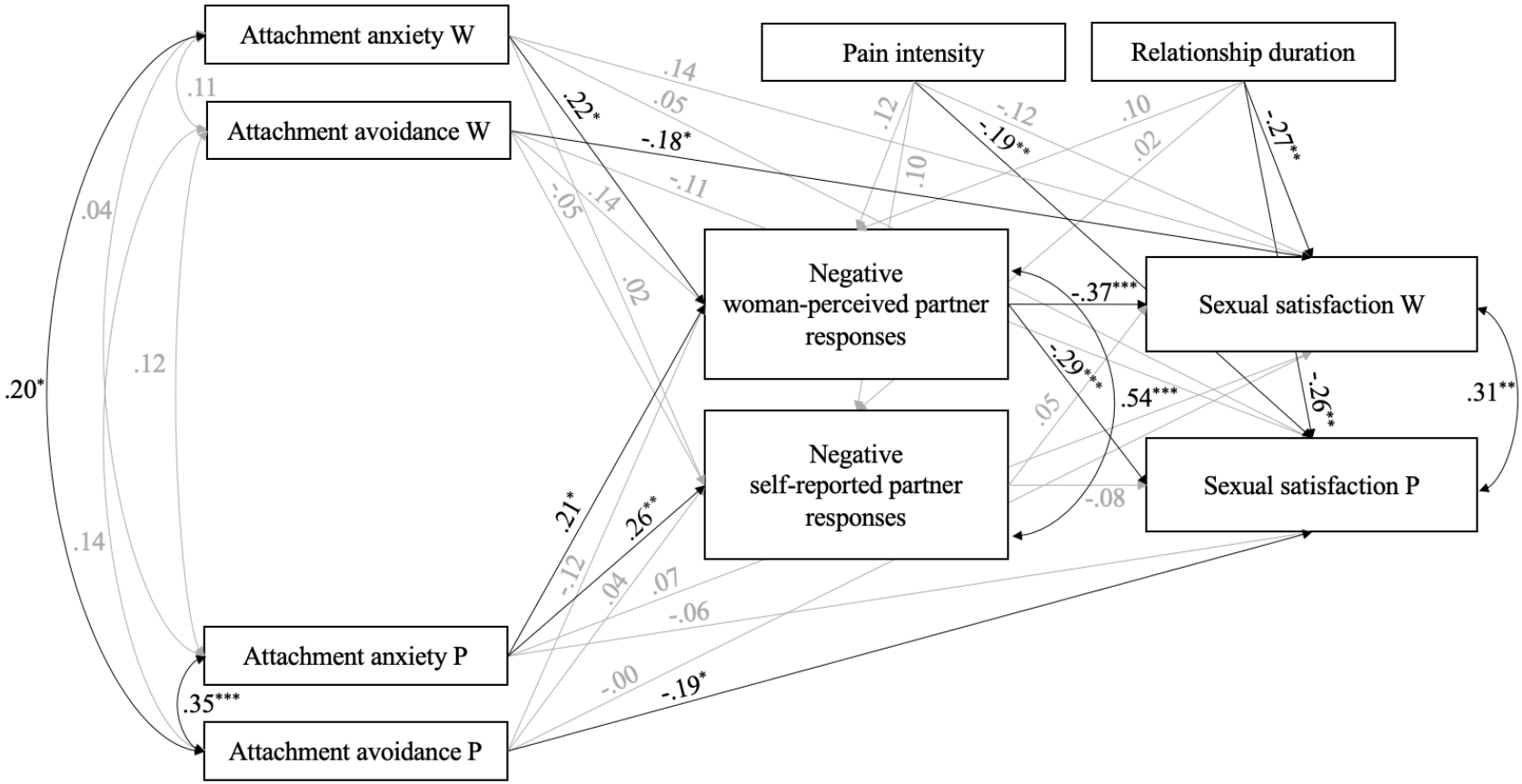
Online Supplementary Figure 2a. Facilitative partner responses as mediators of the association between attachment dimensions and relationship satisfaction. W = women with PVD. P = romantic partners of women with PVD. Covariances between attachment dimensions and control variables were not presented in the model to enhance visual presentation. Regression coefficients are standardized scores. * = $p \leq .05$. ** = $p \leq .01$. *** = $p \leq .001$. Non-significant results are presented in gray.



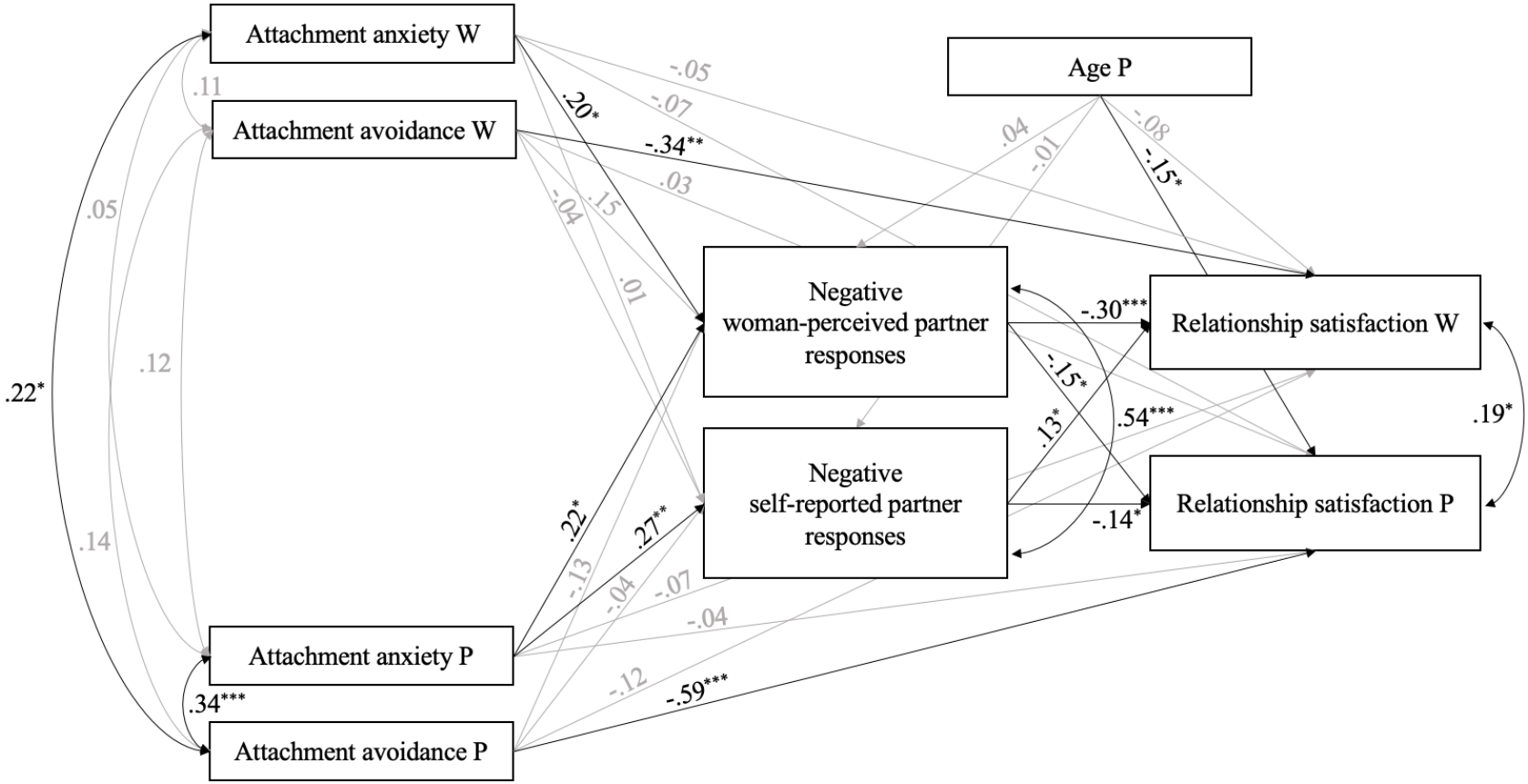
Online Supplementary Figure 3a. Facilitative partner responses as mediators of the association between attachment dimensions and sexual distress. W = women with PVD. P = romantic partners of women with PVD. Covariances between attachment dimensions and control variables were not presented in the model to enhance visual presentation. Regression coefficients are standardized scores. * = $p \leq .05$. ** = $p \leq .01$. *** = $p \leq .001$. Non-significant results are presented in gray.



Online Supplementary Figure 1b. Negative partner responses as mediators of the association between attachment dimensions and sexual distress. W = women with PVD. P = romantic partners of women with PVD. Covariances between attachment dimensions and control variables were not presented in the model to enhance visual presentation. Regression coefficients are standardized scores. * = $p \leq .05$. ** = $p \leq .01$. *** = $p \leq .001$. Non-significant results are presented in gray.



Online Supplementary Figure 2b. Negative partner responses as mediators of the association between attachment dimensions and sexual satisfaction. W = women with PVD. P = romantic partners of women with PVD. Covariances between attachment dimensions and control variables were not presented in the model to enhance visual presentation. Regression coefficients are standardized scores. * = $p \leq .05$. ** = $p \leq .01$. *** = $p \leq .001$. Non-significant results are presented in gray.



Online Supplementary Figure 3b. Negative partner responses as mediators of the association between attachment dimensions and relationship satisfaction. W = women with PVD. P = romantic partners of women with PVD. Covariances between attachment dimensions and control variables were not presented in the model to enhance visual presentation. Regression coefficients are standardized scores. * = $p \leq .05$. ** = $p \leq .01$. *** = $p \leq .001$. Non-significant results are presented in gray.

CHAPITRE IV: TROISIÈME ARTICLE

Attachment and Childhood Maltreatment as Moderators of Treatment Outcome in a Randomized Clinical Trial for Provoked Vestibulodynia

Charbonneau-Lefebvre, V., Vaillancourt-Morel, M.-P., Rosen, N.O., Steben, M., et Bergeron, S. (2022). Attachment and Childhood Maltreatment as Moderators of Treatment Outcome in a Randomized Clinical Trial for Provoked Vestibulodynia. *The Journal of Sexual Medicine*, *19*(3), 479-495. https://doi.org/10.1016/j.jsxm.2021.12.013

L'étudiante a pris part aux étapes suivantes de la réalisation de cette étude : recrutement des participants, évaluation des participants, coordination des suivis avec les participants, conceptualisation, modélisation, analyses statistiques, écriture de l'article comme auteure principale, révision.

Running head**:** TREATMENT OUTCOME IN A RCT FOR PROVOKED VESTIBULODYNIA

TITLE:

Attachment and Childhood Maltreatment as Moderators of Treatment Outcome in a Randomized Clinical Trial for Provoked Vestibulodynia

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ACKNOWLEDGEMENT:

The authors would like to thank Mylène Desrosiers, Marie-Santerre Baillargeon, Myriam Pâquet, Gillian Boudreau, Kate Rancourt and Katherine Petite for their assistance with data collection.

Abstract

Background: Although distal developmental factors, such as attachment and childhood maltreatment (CM), are associated with the occurrence, severity, and adjustment to provoked vestibulodynia (PVD)—the most prevalent form of vulvodynia—no studies to date have examined whether these variables are related to treatment efficacy in the context of PVD. Attachment and CM may act as moderating variables when examining different treatment modalities, whereby individuals with more insecure attachment orientations (anxiety/avoidance) or a history of CM may benefit less from treatments with higher interpersonal contexts, such as sex and couple therapy – a recommended treatment for PVD. **Aim:** The present randomized clinical trial (RCT) examined attachment and CM as predictors and moderators of sexual satisfaction, distress, and function at post-treatment and 6-month follow-up while comparing two treatments for PVD: Topical lidocaine, and a novel cognitive behavioral couple therapy focused on women's pain and partners' sexuality. **Methods:** 108 women with PVD were randomized to a 12-week treatment of either lidocaine or couple therapy. Women completed questionnaires at pre-treatment, post-treatment, and at a 6-month follow-up. **Outcomes:** (1) Global Measure of Sexual Satisfaction; (2) Female Sexual Distress Scale-Revised; (3) Female Sexual Function Index. **Results:** Both attachment and CM were significant moderators of treatment outcomes. At either post-treatment or 6-month follow-up, in the couple therapy condition, women with greater attachment avoidance had poorer outcomes on sexual distress, satisfaction and function, whereas women with higher levels of CM had poorer outcomes on sexual satisfaction and sexual function, compared to women in the lidocaine condition. **Clinical Implications:** Although these novel findings need further replication, they highlight the importance for clinicians to take into account distal factors, for instance, attachment and CM, when treating sexual difficulties such as

PVD, as these variables may affect more interpersonal dimensions of treatment (e.g., trust, compliance, etc.) and ultimately, treatment progress. **Strength & Limitations:** Using a rigorous RCT study design and statistical approach, this study is the first to examine attachment and CM as moderators in the treatment of sexual difficulties. It is however limited by the use of self-report measures, and further studies are necessary to validate the generalisability of current results to other sexual difficulties. **Conclusion:** Findings support the role of interpersonal factors in the treatment of PVD and indicate that short-term psychological interventions, such as couple therapy, may be less beneficial for women with antecedents of CM and attachment insecurity.

Keywords: Provoked Vestibulodynia, Cognitive Behavioral Couple Therapy, Attachment, Childhood Maltreatment, Randomized Clinical Trial

Introduction

Provoked vestibulodynia (PVD) is an chronic pain condition with a prevalence of 8 to 10% among women of all ages.[1] It is characterized by pressure-provoked pain located at the entrance of the vulvar vestibule, often described as a sharp, cutting, or burning sensation.[2] Women with PVD often see themselves deprived of a satisfying sex life, as they report lower sexual satisfaction and function and greater sexual distress than women without this condition.[1] In fact, sexual impairment and distress are often the main motives for women and couples to seek help.[3]

Typical treatments for PVD include psychotherapy, particularly cognitive-behavioral therapy (CBT; in individual, group or couple format), physiotherapy, and medical care such as oral pharmacotherapy, topical ointments or surgical interventions.[4] To this day, two of the top recommended treatments for PVD are psychological interventions and physiotherapy.[4] However, although not recommended for long term use, topical lidocaine – a local anesthetic – has been demonstrated as being effective to reduce pain and remains one of the most prescribed treatments for PVD.[4, 5] Espousing the recent *Interpersonal Emotion Regulation Model of Women's Sexual Dysfunction,* positing that proximal (i.e., occurring during sexual activities) and distal (i.e., predisposing interpersonal events/styles) interpersonal factors play a role in couples' adjustment to sexual difficulties, including PVD, a recent randomized clinical trial (RCT) tested the efficacy of a novel cognitive-behavioral couple therapy (CBCT) in comparison to topical lidocaine.[6] This study demonstrated that CBCT was as efficacious as lidocaine to improve sexual function and more efficacious than lidocaine to reduce sexual distress, suggesting that interpersonal factors, which can be addressed via couple therapy, might modulate women's sexual adjustment to PVD.

Although the two most studied distal factors, attachment and childhood maltreatment (CM), have been linked to sexual adjustment in women with PVD,[7-11] no study to date has examined the impact of these distal developmental factors on treatment efficacy for PVD. However, it has been shown that individuals with a history of CM or with insecure attachment tend to benefit less from treatment, regardless of the pathology treated.[12-16] The present study's goal was therefore to examine attachment and CM as predictors and moderators of women's sexual satisfaction, distress and function at post-treatment and at 6-month follow-up in a RCT for PVD, comparing the efficacy of CBCT and topical lidocaine. Doing so may help first line health professionals to better orient women with PVD towards an appropriate treatment.

Attachment

Attachment develops during childhood according to the sensitivity and consistency of care provided by primary caregivers.[17] Attachment tends to persist through time, where romantic partners often become the main attachment figure in adulthood, to which one turns to fulfill comfort, caregiving and sexual needs.[18] Adult attachment is often conceptualized along two continuous dimensions: attachment anxiety (negative representation of the self, fear of abandonment and excessive proximity needs) and attachment avoidance (negative representation of others, discomfort with emotional intimacy, excessive self-reliance).[19]

Attachment insecurity (i.e. high attachment anxiety and/or high attachment avoidance) in adulthood is linked with poorer overall sexual adjustment in normative samples,[20] and has been associated with greater pain intensity, greater sexual distress, and lower sexual function and satisfaction in clinical samples of women with PVD.[7, 11, 21, 22] However, no study to date has examined the associations between attachment and the treatment of sexual difficulties, including PVD. Yet, past research has identified attachment insecurity as a non-specific predictor of poorer

outcomes in the treatment of chronic pain and a myriad of other psychological difficulties, by being related to poorer patient-provider relationship, poorer treatment adherence and self-efficacy, and difficulty managing illness-related distress. [12, 23-25]

In the field of chronic pain, two studies involving multidisciplinary treatments – including psychological interventions – showed that attachment insecurity was associated with poorer treatment outcomes in terms of depressive symptoms, self-efficacy and pain catastrophizing.[23, 24] Also, an uncontrolled study testing a group therapy combining CBT and acceptance and commitment therapy in 72 individuals with chronic pain reported that those with higher attachment insecurity had greater opioid use and anxiety and depression scores remaining in the clinical range at post-treatment.[25] Only one study found opposite results in a RCT comparing mindfulness-based CBT to a control wait-list, where individuals with higher attachment avoidance experienced a greater decrease in pain intensity in the CBT condition. The authors suggested that as insecure individuals tend to adopt maladaptive coping strategies, they may benefit more from interventions that can enhance their coping abilities than secure individuals.[26]

Although no research has examined the role of attachment while comparing psychological to medical interventions, certain studies suggest that attachment insecurity, especially attachment avoidance, may act as a moderator of treatment outcome.[27] In fact, two RCTs yielding similar results demonstrated that individuals with higher attachment avoidance benefited more from CBT than from interventions that have a greater interpersonal focus, such as interpersonal psychotherapy or psychodynamic psychotherapy.[28, 29] Another single treatment prospective study involving 12 couples showed that greater attachment avoidance was significantly associated with persisting relationship strain three years after terminating a couple

therapy.[30] These results suggest that attachment avoidance may lead to poorer outcomes in treatments with a greater focus on interpersonal and intimate processes, including couple therapy. Although the aforementioned studies found no significant interaction between attachment anxiety and treatment modality, Marmarosh and Wallace (2016) suggested that individuals with greater attachment anxiety may present characteristics and behaviors that could have deleterious effects on couple therapy outcomes.[27] These include inappropriately hurtful disclosures, lack of empathic concern, poor caregiving abilities, more destructive behaviors during conflicts, and ambivalence towards commitment to one's partner. One uncontrolled study examining the outcomes of a 5-week group format of couples' therapy found that compared to secure individuals, insecure individuals had poorer outcomes on psychopathology and problem solving capacity at post-treatment and presented a decrease in these outcomes once the treatment had ceased.[31] Overall, prior research suggests that higher attachment avoidance and anxiety may lead to poorer outcomes in couple therapy due to its highly intimate and interpersonal nature and therefore act as a moderator of treatment outcomes when tested against less interpersonally-oriented treatments, such as topical lidocaine.

Child Maltreatment

CM refers to all types of abuse and neglect perpetrated by a caregiver toward a child under 18 years of age.[32] This maltreatment includes sexual, physical, and emotional abuse as well as physical and emotional neglect, with exposure to multiple types being the norm.[33, 34] Multi-type and repeated episodes of CM are associated with more adverse and long-lasting consequences [35, 36] including in the sexual realm.[37-40] Around 25 to 59% of women with a history of childhood sexual abuse report a sexual dysfunction [41] and more than 80% of patients receiving sex therapy report at least one type of CM.[37, 42]

Population-based studies also showed that women with vulvodynia were three to six times more likely to report severe childhood physical or sexual abuse compared to women without vulvodynia.[8, 43] In women with PVD, higher reports of CM as well as penetrative sexual abuse were related to lower sexual function.[9, 10] As CM is a risk factor for the onset of PVD and is related to lower sexual adjustment in women with PVD, it is surprising that no studies have investigated its impact on treatment. In the treatment of sexual dysfunctions, only one uncontrolled study tested the effect of childhood sexual abuse on the efficacy of mindfulness-based psychoeducational group therapy in 26 women with sexual desire/interest or arousal disorders. It found that women with a history of childhood sexual abuse reported greater improvement on sexual arousal, sexual function and sexual distress than women without such history.[44] However, as mindfulness-based interventions have been shown to be effective in treating trauma symptoms, this result might not extend to CBT or medical treatments for PVD.[45, 46]

Childhood trauma is related to less trust in physicians and the health care system and poorer adherence to recommended health care.[47] However, studies examining CM as a predictor or moderator of treatment outcomes in RCTs for chronic mental health issues reported that CM does not globally predict poorer response to treatment, but rather acts as a moderator. In non-trauma-focused psychotherapies, such as CBT, individuals with a history of CM experience poorer treatment outcomes than individuals without such history.[15, 48] Yet, medical treatments seem to be as effective regardless of CM history. For instance, CM was unrelated to treatment response to antidepressants in patients with irritable bowel syndrome.[49] In a RCT including a sample of 334 adolescents with persistent depression, youth with a CM history responded more poorly to the CBT combined with antidepressants condition compared with non-abused youth,

whereas this difference was not observed in the antidepressants alone condition.[50] Similarly, in a RCT involving 427 adolescents with major depressive disorder, teens with a history of sexual abuse reported significant improvement in the antidepressant medication condition, whereas they remained in the depressed range in the CBT alone condition.[51] As non-trauma focused CBT does not specifically address the trauma or its repercussions, it may not be enough to offer individuals with a history of CM the skills to overcome their trauma-related schemas and better regulate their emotions, and therefore be less effective than medical treatments for these individuals.[52] Taken together, these results suggest that women with PVD with a history of CM may benefit more from medical interventions than from non-trauma focused psychotherapeutic interventions.

Study Aims and Hypotheses

The current study examined whether distal developmental factors–attachment and CM–differentially predicted the effect of treatment for PVD on women's sexual adjustment (sexual satisfaction, sexual distress and sexual function) at post-treatment and 6-month follow-up in a RCT comparing CBCT to topical lidocaine. We hypothesized that women with greater attachment avoidance or attachment anxiety and/or with a greater history of CM would experience poorer treatment outcomes, and that this effect would be greater in the CBCT condition relative to the lidocaine condition.

Method

Participants

Participants were 108 women diagnosed with PVD currently involved in a romantic relationship. Women were recruited in two sites (Site A: $n = 47$; Site B: $n = 61$) between May 2014 and March 2018. Forty-five participants (42%) were recruited through advertising in

newspapers, websites, universities, hospitals and medical clinics, 37 (34%) through participation in prior studies by the authors, 25 (23%) were referred by a physician and one (1%) by a friend.

Inclusion criteria for this study were: (1) being 18 years old or over, (2) being engaged in a long-term relationship of at least six months, (3) women cohabiting and/or having at least 4-in person contacts with their romantic partners every week, for the past six months(4) penetration or attempted penetration at least once per month, for the past three months, (5) women experiencing pain at the entrance in the vulvo-vaginal region in at least 80% of intercourse attempts for at least six months, (6) pain triggered solely during activities exerting pressure on the vulvar vestibule (e.g., during tampon insertion, intercourse) and, (7) women having a diagnosis of PVD confirmed by a collaborating physician. Women were excluded if there were: (1) lack of clear evidence that the pain is pressure-provoked or linked to intercourse, (2) women with pain having an active infection (e.g., candida) or dermatological condition, as diagnosed by a physician (3) involvement of the participants in another form of treatment for PVD or couples therapy, (4) self-reported severe untreated medical or psychiatric condition, (5) pregnancy or planning on being pregnant during the study's timeframe, (6) women being over 45 years old and/or having started menopause, due to hormonal and gynecological changes associated with perimenopause and menopause, [53, 54] (7) clinical levels of relational distress, as indicated by the cut-off score of the widely used and well-validated Couple Satisfaction Index;[55] and (8) self-reported intimate partner violence.

Procedure

The recruitment and flow of participants throughout the study are shown in Figure 1. Interested participants were contacted and screened for eligibility by phone by a research assistant. Eligible participants were invited for an in-person orientation meeting during which the

procedure and consent form were explained by a research assistant or a Ph.D. student in clinical psychology. Free and informed consent from participants was obtained during this meeting. During this session participants also took part in a structured interview on sociodemographic variables and pain and sexual history, followed by the completion of pretreatment measures on an online secured platform. Based on their answers, eligibility was determined and all eligible women moved forward with an appointment with a gynaecologist to assess PVD symptomatology using the cotton-swab test, which is a standardized and validated method whereby pressure is applied at the the three-, six-, and nine-o'clock positions of the vulvar vestibule using a cotton swab while women rate their pain intensity from 0 to 10.[4]

Women with a confirmed PVD diagnosis and their partners were then randomized, according to the independent stratified randomization method provided by Dacima, to one of two treatment conditions, either a CBCT or nightly application of topical lidocaine. At each site, only research coordinators, assistants dedicated to the lidocaine condition and CBCT therapists were aware of participants' randomization status. All other research personnel and investigators were blind for the entire duration of the study. Participants took part in the treatments for a period of 12 weeks, which was followed by a post-treatment laboratory-based assessment during which they took part in a structured interview and completed self-report questionnaires. Six months after the post-treatment assessment, participants were invited for a 6-month follow-up following the same procedure. Participants received a $30 financial compensation for the completion of questionnaires at each time-point and treatments were offered free of charge. The study was approved by the Centre Hospitalier de l'Université de Montréal and the IWK Health Centre Institutional Review Boards. The results of the main RCT have been accepted for publication.[56]

Treatment Conditions

Cognitive Behavioral Couple Therapy (CBCT). Participants randomized to CBCT took part in 12 weekly in-person sessions of 75 minutes, with the first session being 90 minutes to accommodate an assessment. The aims of CBCT were to: 1) enable participants to reframe PVD as a multidimensional pain problem affecting both women and their partners, 2) promote adaptive pain coping to in turn decrease pain intensity, and 3) improve couples' sexual well-being by encouraging women and their partners to adapt their sexuality to the pain context. The treatment protocol included information about the nature and consequences of PVD, education about pain as a multidimensional problem, breathing techniques, vaginal dilation exercises, cognitive defusion, distraction focusing on sexual imagery, expansion of the sexual repertoire, and exercises to improve pain and sexuality-relevant communication and intimacy in couple interactions.

Therapists were clinical psychology PhD students (n = 8) or junior clinicians (PsyD or PhD, n = 2; MA in clinical sexology, n = 1) who followed a treatment manual outlining the content of each session and homework to be assigned. Therapists received training on delivering the CBCT beforehand, were instructed to adhere to the treatment manual and received weekly supervision with a registered clinical psychologist specialized in sex and couple therapy. Sessions were video recorded and a random sample representing one quarter of videos were viewed and coded by two independent clinical associates, which revealed that therapists adhered to the treatment manual 93.8% of the time, with a strong inter-rater reliability of .70 (mean weighted kappa). Participants in the CBCT arm attended 10.6 out of 12 sessions (SD = 3.53; 88.7%), and women completed 67.7% of homework exercises.

Topical Lidocaine. Participants randomized to this condition applied a 5% lidocaine ointment (50mg/g, Xylocaïne®, AstraZeneca, tube of 35g) on the vulvar vestibule nightly for 12 weeks. A research assistant was trained by a co-investigating physician in the use of lidocaine to explain its application to participants in a standardized manner and performed weekly phone calls to participants to monitor potential adverse effects. Women were instructed to apply the ointment on a cotton ball that would be placed at the vaginal introitus, with the purpose of having the analgetic be kept in contact with the entry of the vagina overnight for a period of seven to eight hours via their underwear. If participants wished to engage in sexual activity on any given night, they were instructed to remove the cotton ball and any remaining excess of the lidocaine ointment before sex, and to repeat the regimen before going to bed. Women monitored their adherence to treatment in a booklet. Women used the lidocaine cream 79.4% of the nights during the treatment period.

Measures

Attachment

Attachment was measured using the Experiences in Close Relationships – Short Form.[57] Participants rated their general feelings regarding romantic relationships according to two continuous dimensions, namely attachment anxiety (e.g., "I worry that romantic partners won't care about me as much as I care about them") and attachment avoidance (e.g., "I try to avoid getting too close to my partner"). Each subscale includes six items and participants rated their answers on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores indicate greater attachment anxiety or avoidance. Good psychometric properties are reported for this instrument, with alpha coefficients and test-retest correlations of, respectively, .86 and .82 for attachment anxiety and .88 and .89 for attachment avoidance.[57]

Ordinal correlation alphas were .78 for attachment anxiety and .79 for attachment avoidance in the current sample.

Childhood Maltreatment

The Childhood Trauma Questionnaire (CTQ)– Short Form[58] was used to assess five types of CM, namely emotional, physical and sexual abuse, and emotional and physical neglect. Emotional abuse was defined as demeaning behaviors or verbal assaults by an older individual resulting in the child's humiliation or in the lessening of sense of self-worth. Physical abuse was considered as bodily assaults resulting in or causing risk of injury by an older individual towards a child. Sexual abuse was defined as any sexual contact or demeanour between a child under 18 years of age and an older individual. Emotional neglect was considered as a failure to acknowledge and to meet the child's psychological and emotional needs, such as love, nurturance, belonging and support. Finally, physical neglect was defined as the failure of caretakers to provide for the child's basic physical needs of shelter, food, clothing, safety and/or health care. Participants rated the frequency with which these various forms of abuse and neglect took place during their childhood on a five-point Likert scale ranging from 1 (*never true*) to 5 (*very often true*). Items were summed and total scores ranged from 25 to 125, where higher scores indicated more severe forms of CM given that this instrument measures both the frequency of each type of abuse or neglect and the cumulative experience of multiple types of CM. The CTQ shows good psychometric properties, with Cronbach's alphas varying from .61 to .95 and test-retest correlations between .79 and .95 over a two to six-month period.[58-60] Cronbach's alpha in the current sample was .92.

Sexual Satisfaction

The Global Measure of Sexual Satisfaction (GMSEX)[61] was used to assess women's subjective global satisfaction with their sexual relationship with their partner. This scale includes five bi-polar items to which individuals report whether they experience their sexuality as good or bad, pleasant or unpleasant, negative or positive, satisfying or unsatisfying, and valuable or worthless, on a 7-point Likert scale. Total scores range from 5 to 35, where higher scores indicate greater sexual satisfaction. A study comparing instruments assessing sexual satisfaction found the GMSEX to be the most satisfactory,[62] with an alpha of .90 and a test-retest correlation of .84.[61] Cronbach's alpha in the current sample was of .91.

Sexual Distress

Sexual distress was measured using the Female Sexual Distress Scale-Revised (FSDS-R).[63] This instrument is designed to assess personal distress related to sexuality by measuring, among other feelings, the levels of anger, guilt, shame, stress, and dissatisfaction regarding one's sex life. Participants rated the frequency of these feelings on a 5-point Likert scale of 0 (*Never*) to 4 (*always*). Total scores range from 0 to 52, where higher scores indicate greater levels of sexual distress. This instrument shows good psychometric properties with Cronbach's alphas of >.86 in original validation study,[63] and of .91 in the current sample.

Sexual Function

Women's sexual function was assessed using the Female Sexual Function Index.[64] This scale is composed of 19 items assessing six dimensions of sexual function over the past 4 weeks; desire, arousal, lubrication, orgasm, satisfaction, and pain. Total scores range from 2 to 36, where higher scores indicate better sexual functioning. This instrument has demonstrated good psychometric properties in both populational[64, 65] and PVD samples,[66] and Cronbach's alphas ranging from .82 to .97 and from .90 to .97 have been reported in respective samples. Cronbach's

alpha in the current sample was .89. Women who had no sexual activity in the last four weeks received a code of 'missing' for that question, to avoid biasing the score towards dysfunction.[67]

Data Analysis

Descriptive analyses and bivariate correlations were examined using SPSS 26.0. Multilevel modeling was used to examine if attachment dimensions and CM predicted or moderated treatment outcomes using Mplus 8.3.[68] Two-level models (time points nested in women) were separated by outcome (sexual satisfaction, sexual distress and sexual function) and by moderator (attachment and childhood maltreatment), for a total of six models. Each model included the main effect of time as a within-subjects variable (level 1; pretreatment, post-treatment, six-month follow-up; simultaneously estimated separate linear slopes of change from pre- to post-treatment and from pretreatment to follow-up with pretreatment as the reference), the main effect of attachment or childhood maltreatment and of treatment condition as between-subjects variables (level 2), all two-way interactions between time, attachment or childhood maltreatment and treatment condition as cross-level interactions, and the interaction between time, attachment or childhood maltreatment, and treatment condition as three-way cross-level interactions. We included random effects on the intercepts and time slopes of all models. A significant three-way cross-level interaction indicated that the effect of the treatment condition (CBCT versus lidocaine) on the response to treatment significantly varied at different levels of attachment dimensions or CM. When all three-way cross-level interactions were nonsignificant, they were removed from the model and only the two-way cross-level interactions between time and attachment or CM and between time and treatment condition were kept. A significant cross-level interaction between time and attachment or CM indicated that the response to treatment varied at different levels of the predictor (with no significant difference between treatment

condition). To interpret significant three-way interactions, simple slopes tests were estimated for either one or two standard deviations (SD) above (+1 or +2 SD) and below the mean (-1 or -2 SD) on the moderator. Attachment dimensions and CM were centered prior to analysis and calculation of interactions. Treatment condition was effect coded with topical lidocaine = -0.5 and CBCT = 0.5 for treatment condition. Data were analyzed with ML estimation; missing data from participants who dropped-out of the study and score-level missings were handled using Full Information Maximum Likelihood (FIML);[68] all randomized participants were included in the analyses based on the intent-to-treat principle.

Results

Sample Characteristics and Descriptive Analysis

Of the 108 eligible participants, 53 were randomized to CBCT and 55 and were randomized to the lidocaine condition. Overall, 88% of participants (n = 95) completed the treatment and completion rates for post-treatment and follow-up were 90.7% (n = 98), with no significant difference between treatment conditions. No significant differences were found between treatment conditions on sociodemographic characteristics, childhood maltreatment, attachment avoidance and sexual outcomes at pretreatment. Attachment anxiety was significantly different between treatment conditions (CBCT: M = 3.81, SD = 1.26; lidocaine: M = 3.20, SD = 1.12; $t(105) = 2.65$, p = .009). Sociodemographic characteristics for the total sample are presented in Table 1.

Zero-Order Correlations

Correlational analyses were conducted between sociodemographic variables and study outcomes to identify potential confounding variables. Relationship duration was significantly correlated with sexual satisfaction (r = -.26, p =.006) and with sexual function (r = -.20, p =.043)

at pretreatment. A significant correlation was found between level of education (in years since first grade) and sexual function at 6-month follow-up (r = -.25, p = .018). Finally, independent samples t-tests revealed there was a significant difference in sexual distress according to treatment site at pretreatment (Site A: M = 31.57, SD = 9.89; Site B: M = 36.03, SD = 9.28 ; $t(106) = 2.41$, p = .018) and at post-treatment (Site A: M = 20.92, SD = 14.00 ; Site B: M = 28.29, SD = 13.53 ; $t(95) = 2.59$, p = .011). Relationship duration, education and treatment site were included as covariates in their respective models according to their correlation with corresponding outcomes. Relationship duration and education were centered, and treatment site was effect coded (0.5 = Site A and -0.5 =Site B). Means, standard deviations, and correlations between moderators at pretreatment and study outcomes at pretreatment, post-treatment and 6-month follow-up are presented in Table 2.

Moderators of Treatment Outcomes

Attachment Dimensions

Results for sexual satisfaction are presented in Model 1 of Table 3. Moderation analyses indicated that there was a significant interaction between time, treatment condition and attachment avoidance on sexual satisfaction at 6-month follow-up. As presented in Figure 2, in the CBCT condition, women with lower levels of attachment avoidance (- 1 SD) experienced a significant increase in sexual satisfaction between pretreatment and 6-month follow-up, whereas those with higher levels of avoidance (+ 1 SD) did not. In the lidocaine condition, women with lower levels of attachment avoidance did not experience a significant increase, whereas those with higher levels of avoidance experienced a significant increase in sexual satisfaction between pretreatment and 6-month follow-up. Attachment anxiety did not act as a significant predictor nor moderator of sexual satisfaction at post-treatment and 6-month follow-up.

Results for sexual distress are presented in Model 2 of Table 3. A significant interaction was found between time, treatment condition and attachment avoidance on sexual distress at post-treatment. As presented in Figure 3, in the CBCT condition, women with very low levels of attachment avoidance (- 2 SD) experienced a significant decrease in sexual distress between pretreatment and post-treatment, whereas women with very high levels of attachment avoidance (+2 SD) did not. In the lidocaine group, women with very high levels of avoidance (+ 2 SD) experienced a significant decrease in sexual distress between pretreatment and post-treatment, while those very low levels of attachment avoidance did not. Attachment anxiety did not act as a significant predictor nor moderator of sexual distress at post-treatment and 6-month follow-up.

Results for sexual function are presented in Model 3 of Table 3. There was a significant interaction between time, attachment avoidance, and treatment condition on sexual function at both post-treatment and at 6-month follow-up. As presented in Figure 4, in the CBCT condition, women with very low levels of attachment avoidance (-2 SD) reported a significant increase in sexual function between pretreatment and post-treatment and between pretreatment and 6-month follow-up, whereas women with very high levels (+2 SD) of avoidance did not. In the lidocaine condition, women with very low levels of attachment avoidance did not experience a significant increase in sexual function at post-treatment and 6-month follow-up, whereas women with very high levels of attachment avoidance did. Attachment anxiety did not act as a significant predictor nor moderator of sexual function at post-treatment and 6-month follow-up.

Childhood Maltreatment

Results for sexual satisfaction are presented in Model 4 of Table 4. A significant interaction was observed between time, CM and treatment conditions on sexual satisfaction at 6-month follow-up. Results, reported in Figure 5, showed that in the CBCT condition, women with

lower levels of CM (- 1 SD) experienced a significant increase in sexual satisfaction between pretreatment and 6-month follow-up, while those with higher levels of CM (+ 1 SD) did not. Conversely, in the lidocaine condition, women with lower levels of CM (- 1 SD) did not experience a significant increase in sexual satisfaction, while women with higher levels of CM (+ 1 SD) did.

Results for sexual distress are presented in Model 5 of Table 4 and showed that CM did not act as a significant predictor or moderator of sexual distress at post-treatment and 6-month follow-up.

Results for sexual function are presented in Model 6 of Table 4. As presented in Panel A and Panel B of Figure 6, there were significant interactions between time, CM and treatment. At both post-treatment and 6-month follow-up, women with lower levels of CM (-1 SD) randomized to CBCT and women with any level of CM randomized to lidocaine experienced a significant increase in sexual function, whereas women with higher levels of CM (+1 SD) randomized to CBCT did not.

Discussion

The present study examined the role of distal developmental factors in the treatment of PVD. Results indicated that both attachment and CM acted as significant moderators of treatment outcomes, whereby women with greater attachment avoidance or having experienced high levels of CM had poorer sexual outcomes in the CBCT condition than in the lidocaine condition. These results provide further evidence that distal interpersonal factors may influence women's response to treatment for PVD.[69] Findings highlight that attachment and CM need to be assessed and considered in the treatment of PVD, which may help health professionals make informed recommendations.

Attachment as a Treatment Moderator

In line with our hypothesis, attachment avoidance acted as a significant treatment moderator of treatment outcome, where women with higher levels of attachment avoidance experienced poorer outcomes for sexual satisfaction at 6-month follow-up, sexual distress at post-treatment, and sexual function at both post-treatment and 6-month follow-up in the CBCT condition compared to the lidocaine condition. These results suggest that women with a greater fear of intimacy who tend to be more self-reliant and distrusting of others have greater difficulty benefitting from couples' psychotherapy for PVD than those who are more comfortable with emotional closeness. This result is consistent with the current literature on adult attachment suggesting that individuals with greater attachment avoidance experience poorer psychotherapeutic outcomes.[12]

Avoidant individuals tend to avoid contexts that could increase emotional proximity.[70] A few of the main goals of the present CBCT were to promote couples' relational and sexual intimacy, communication and problem-solving skills through intimate conversations and by using at home exercises to help couples increase feelings of closeness. Being encouraged to reveal one's feelings and to establish greater emotional, physical and sexual proximity with their partner might be challenging for individuals who have avoidant attachment orientations. This may in turn lead them to dismiss, and withdraw from, the therapeutic process and to subsequently benefit less from CBCT.[20, 27] This interpretation is in line with the conclusions of McBride, Atkinson, Quilty and Bagby (2006) positing that individuals with higher attachment avoidance might do better in less 'relationship focused' therapies, as they may be too threatening for those who regulate their attachment insecurity through the denial of relationship needs.[29] Also, establishing a trusting relationship with one's partner and with a therapist may take more

time for women with greater attachment avoidance,[71] especially since they are less likely to seek therapy and more likely to have a more negative attitude towards therapy than secure individuals.[72] Considering that the current CBCT is of short duration, twelve sessions of couple therapy may be insufficient for women with higher attachment avoidance to establish a trusting relationship with the therapist and fully engage and benefit from the therapeutic process.

Concurrently, by their strongly self-reliant nature,[19] it may be easier and, incidentally, more beneficial for more avoidant women to use a medical treatment. Indeed, the use of topical lidocaine allowed them to reduce their symptomatology while minimally involving their partner, without having to disclose much information to them and having little contact with professionals – i.e., being self-sufficient in their treatment compliance. Moreover, women in the topical lidocaine condition may have felt empowered by the fact that they oversaw their own treatment, which aligns with avoidant individual's tendency to be self-reliant. However, as the present study is the first to date to examine attachment while comparing treatment modalities, these results must be interpreted cautiously until further replication of these findings becomes available.

Interestingly, we found that attachment anxiety was not a significant moderator nor predictor of treatment outcome. Sexuality plays an important role in affection display and feeling emotionally close to one's partner, especially in individuals with greater attachment anxiety.[20] Therefore, as both treatment conditions are oriented towards the goal of getting closer to one's partner, women with PVD with more attachment anxiety, although presenting more difficulties in emotion regulation and self-efficacy,[21, 73] may be more motivated, engaged, and compliant towards their treatment. This may lead to positive outcomes, just as in more securely attached individuals, as they strongly value their sex life. This finding may therefore be specific to either

the couple's therapy context or to the treatment of sexual difficulties. As previous investigations of the role of attachment in the context of treatment yielded inconsistent results regarding attachment anxiety,[27] further replication of these results is needed to better understand the implication of attachment anxiety in this context.

Childhood Maltreatment as a Treatment Moderator

Mostly in line with our hypothesis, CM acted as a significant moderator of treatment outcomes, whereby individuals in the CBCT condition with higher levels of CM experienced poorer treatment outcomes for sexual satisfaction at 6-month follow-up and sexual function at both post-treatment and 6-month follow-up compared to the lidocaine condition. These results suggest that women with PVD who have experienced abuse or neglect as children may have more difficulty benefiting from short-term, sexuality-focused couple therapy than from other forms of medical treatment, such as topical lidocaine. Broadly, these results are consistent with RCTs for chronic mental health conditions which have found that CM predicted poorer response to treatment in non-trauma-focused CBT, but not in medical treatment.[50, 51]

Meta-analyses have reported that trauma-focused psychotherapy yields superior outcomes than non-trauma focused therapy for trauma-related symptoms.[52, 74] Indeed, as was the case in the present CBCT for PVD, manualized non-trauma focused CBT usually excludes exposure or other specific techniques that have been shown to decrease trauma-related symptoms.[52] Moreover, individuals with a history of CM have demonstrated higher levels of emotion dysregulation and lower mentalizing abilities that impede the process and progress of couple therapy.[75] Indeed, women with a history of CM may have lacked fundamental skills that were necessary for undergoing the present couple therapy for PVD and some topics addressed or exercises prescribed during treatment may have represented important triggers of trauma-related

emotions and reactions.[76] Given that CM may alter the associations with touch and the ability to experience sexual pleasure, prescribed exercises such as at-home vaginal dilation and couple sensate focus exercises may have been particularly challenging for some women reporting CM.[77] The current CBCT may have been less effective for women who have experienced CM as it was manualized and lasted only 12 sessions, which may not provide the space needed to efficiently address CM and in-treatment trauma-related reenactment and thus help women to be vulnerable in front of their partner. As previously recommended by other researchers, incorporating an understanding of the impacts of trauma on sexuality and the couple relationship as well as affect regulation strategies to our current CBCT would represent an interesting avenue to adapt our treatment for women who reported CM.[78]

Whereas non-trauma focused CBT is usually less effective for patients reporting a CM history, medical treatment was shown to be as effective regardless of CM history in patients with irritable bowel syndrome.[49] The use of topical lidocaine in treating PVD does not require one to be vulnerable with a partner and does not address trauma-related difficulties such as communication issues, sexual assertiveness, affect dysregulation, and negative self-concept, which may be less confronting for women reporting CM and thus increase compliance with treatment. Thus, as opposed to CBCT, topical lidocaine may be effective to deal with the more objective physical component of PVD and thus increase sexual function, and over time, sexual satisfaction. Interestingly, probably due to the fact that CBCT was highly focused on pain and associated distress, CM did not act as a predictor nor a moderator of sexual distress at post-treatment and 6-month follow-up. Moreover, women randomized to the lidocaine condition with lower levels of CM experienced poorer outcomes for sexual satisfaction at 6-month follow-up compared to women in the CBCT condition. Other unexamined factors related to the

development of PVD in these women without CM, such as partner support and sexual self-efficacy, might help understand why the increase in sexual satisfaction obtained with topical lidocaine was not maintained over 6 months. This surprising result should be replicated in future work before we make any recommendations based on this finding.

Strengths and Limitations

This study contributes to a scarce literature on the treatment of vulvodynia and has a number of strengths. Foremost, rigorous methodological and statistical processes were used throughout the study, such as a randomized trial design and intent-to-treat analyses, as recommended by current guidelines.[79] Also, this study is the first to examine attachment and CM as moderators in the treatment of sexual difficulties, although these variables are identified as central to sexual health and couple therapy.[78, 80] Results must however be interpreted in light of this study's limitations. The use of self-report measures may introduce retrospective or social desirability biases. Also, this study's sample was predominantly White and heterosexual, which limits the generalisability of our results to more diverse populations. Furthermore, although high internal validity plays a key role in validating novel treatments and is a strength of the present study, further studies are necessary to support the generalisability of the present results to other sexual dysfunctions. Importantly, as the current manualized CBCT compels participants to engage in more extensive levels of emotional and sexual intimacy, results may not reflect other forms of psychotherapy, such as individual or group cognitive-behavioral therapy, or longer, more tailored, couples' interventions, which can address attachment and trauma-related difficulties.

Theoretical and clinical implications

From a theoretical perspective, this study lends support to the *Interpersonal Emotion Regulation Model* of women's sexual dysfunction by underscoring how distal interpersonal factors may influence the course of treatment for PVD.[69] As stressed by Norcross and Wampold (2011), there is a strong need to identify variables that can help clinicians make informed decisions as to which treatment modalities may be more effective for their patients.[81] The present study contributes to this matter by being the first to examine the differential impact of attachment and CM in two treatment conditions for sexual difficulties. From a clinical standpoint, this research captures the importance of distal interpersonal factors in the treatment of sexual difficulties as they may influence the course of treatment. Some researchers have recently been advocating for more attachment- and trauma-informed care in the treatment of chronic diseases and mental illnesses, as these variables influence individuals' physical, psychological, and social wellbeing.[82, 83] The present results support this matter where future CBCT for PVD should address attachment and trauma-related difficulties in treating PVD.

In conclusion, the present study showed that women with PVD with greater attachment insecurity and/or CM history benefited less from non-tailored couples' interventions of high interpersonal nature, in the present case a CBCT for PVD, and benefited more from the application of topical lidocaine for improving their sexual wellbeing. Although the present findings should be interpreted carefully until further replication, healthcare professionals should account for attachment and CM while pondering treatment modalities, as these variables have implications for the interpersonal dimensions of treatment, such as level of disclosure, help-seeking behaviors, trust, and compliance. Future studies should examine the pathways through which attachment insecurity or CM operate, for instance, through the development of the

therapeutic alliance in both psychotherapeutic and medical settings, in order to better understand their implication in treatment efficacy for sexual dysfunctions.

Acknowledgments

The authors would like to thank Mylène Desrosiers, Marie-Santerre Baillargeon, Myriam Pâquet, Gillian Boudreau, Kate Rancourt and Katherine Petite for their assistance with data collection.

Funding

This study was supported by a doctoral fellowship from the Fonds de Recherche du Québec - Santé awarded to the first author (254992) and by a grant from the Canadian Institutes of Health Research (MOP 130298) awarded to Natalie O. Rosen and Sophie Bergeron. The first author received the Society for Sex Therapy and Research's Sandra R. Leiblum Student Research Award (2022) for this manuscript.

Conflict of interests

The authors declare that they have no conflict of interest.

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Table 1

Sociodemographic and Clinical Characteristics

	***M*(*SD*) or %(*n*)**
Age (years)	27.06 (6.26)
Education (years)	17.06 (2.29)
Age at first intercourse	17.83 (3.24)
Pain duration (years)	6.52 (5.20)
Cultural background	
French Canadian	39.8% (43)
English Canadian	36.1% (39)
American	0.0% (0)
European	7.4% (8)
Other	15.7% (17)
Relationship status	
Not living with partner	20.4% (22)
Cohabiting	51.9% (56)
Married	27.8% (30)
Relationship duration (years)	5.43 (4.14)
Couple's annual income (CAD$)	
$0-$19,999	18.5% (20)
$20,000-$39,999	20.4% (22)
$40,000-$59,999	13.9% (15)
$60,000-$79,999	14.8% (16)
$80,000-$99,999	11.1% (12)
$100,000 and over	20.4% (22)
Treatment site	
Site A	43.5% (47)
Site B	56.5 % (61)

Table 2

Means, Standard Deviations, and Correlations for Pretreatment Moderators and Study Outcomes

	M (SD)	*n*	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Attachment anxiety	3.50 (1.22)	107	—										
2. Attachment avoidance	1.99 (.87)	108	.10	—									
3. Childhood maltreatment	36.22 (12.49)	108	.02	.06	—								
4. Sexual satisfaction Pre	21.99 (6.75)	108	.12	-.12	-.17	—							
5. Sexual satisfaction Post	26.47 (6.96)	97	.02	-.11	-.09	.44***	—						
6. Sexual satisfaction F-U	25.14 (6.85)	91	-.07	-.07	-.04	.43***	.64***	—					
7. Sexual distress Pre	34.09 (9.76)	108	.11	.08	-.03	-.47***	-.37***	-.38***	—				
8. Sexual distress Post	25.18 (14.14)	97	.09	.09	-.04	-.26**	-.68***	-.51***	.54***	—			
9. Sexual distress F-U	24.02 (14.57)	95	.16	.00	-.02	-.28**	-.61***	-.77***	.50***	.71***	—		
10. Sexual function Pre	19.56 (5.12)	103	.05	-.17	-.16	.64***	.34**	.27*	-.40***	-.30**	-.23*	—	
11. Sexual function post	22.65 (5.77)	93	.05	-.15	-.19	.24*	.69***	.45***	-.23*	-.70***	-.56***	.45***	—
12. Sexual function F-U	23.20 (5.87)	87	-.07	-.04	-.06	.28**	-.48***	.66***	-.24*	-.53***	-.72***	.46***	.71***

Note. Pre = Pretreatment. Post = Post-treatment. F-U = Follow-up. * $p < .05$; ** $p < .01$; *** $p < .001$

Table 3

Multilevel Model for the Associations Between Attachment Dimensions and Study Outcomes

Model 1: Sexual Satisfaction						
Level-1	b (SE)	Z	*p*	b (SE)	Z	*p*
Intercept	22.10 (0.61)	36.36	.000			
Time (T1-T2)	4.41 (0.64)	6.87	.000			
Time (T1-T3)	2.88 (0.66)	4.38	.000			
Level-2	**Effect on time T1-T2 slope**			**Effect on time T1-T3 slope**		
Treatment condition	2.23 (1.34)	1.67	.095	0.39 (1.36)	0.27	.775
Attachment Anxiety	-0.20 (0.56)	-0.36	.721	-0.45 (0.56)	-0.79	.428
Attachment Avoidance	0.09 (0.73)	0.13	.901	0.54 (0.74)	0.73	.464
Treatment condition × Attachment avoidance[a]	-2.52 (1.47)	-1.72	.086	**-3.84 (1.50)**	**-2.57**	**.010**
Model 2: Sexual distress						
Level-1	b (SE)	Z	*p*	b (SE)	Z	*p*
Intercept	33.33 (0.97)	34.48	.000			
Time (T1-T2)	-8.83 (1.09)	-8.11	.000			
Time (T1-T3)	-9.72 (1.18)	-8.24	.000			
Level-2	**Effect on time T1-T2 slope**			**Effect on time T1-T3 slope**		
Treatment condition	**-8.08 (2.23)**	**-3.62**	**.000**	-2.64 (2.41)	-1.09	.275
Attachment anxiety	0.73 (0.91)	0.80	.423	1.19 (0.99)	1.19	.233
Attachment avoidance	1.18 (1.21)	0.98	.329	-0.68 (1.30)	-0.52	.601
Treatment condition × Attachment avoidance[a]	**5.56 (2.42)**	**2.30**	**.021**	4.47 (2.61)	1.72	.086
Model 3: Sexual function						
Level-1	b (SE)	Z	*p*	b (SE)	Z	*p*
Intercept	19.66 (0.49)	40.50	.000			
Time (T1-T2)	3.19 (0.52)	6.18	.000			
Time (T1-T3)	3.56 (0.53)	6.68	.000			
Level-2	**Effect on time T1-T2 slope**			**Effect on time T1-T3 slope**		
Treatment condition	0.79 (1.08)	0.73	.464	-0.26 (1.11)	-0.24	.813
Attachment anxiety	0.36 (0.45)	0.80	.423	-0.34 (0.46)	-0.73	.467
Attachment avoidance	0.11 (0.58)	0.18	.856	0.82 (0.59)	1.40	.163
Treatment condition × Attachment avoidance[a]	**-3.14 (1.18)**	**-2.66**	**.008**	**-2.50 (1.20)**	**-2.08**	**.038**

Note. Recruitment site: 0.5 = Site A and -0.5 = Site B; Treatment condition: -0.5 = Topical Lidocaine and 0.5 = CBCT. [a]See Figures 1, 2 and 3 for results of tests of simple slopes

Table 4

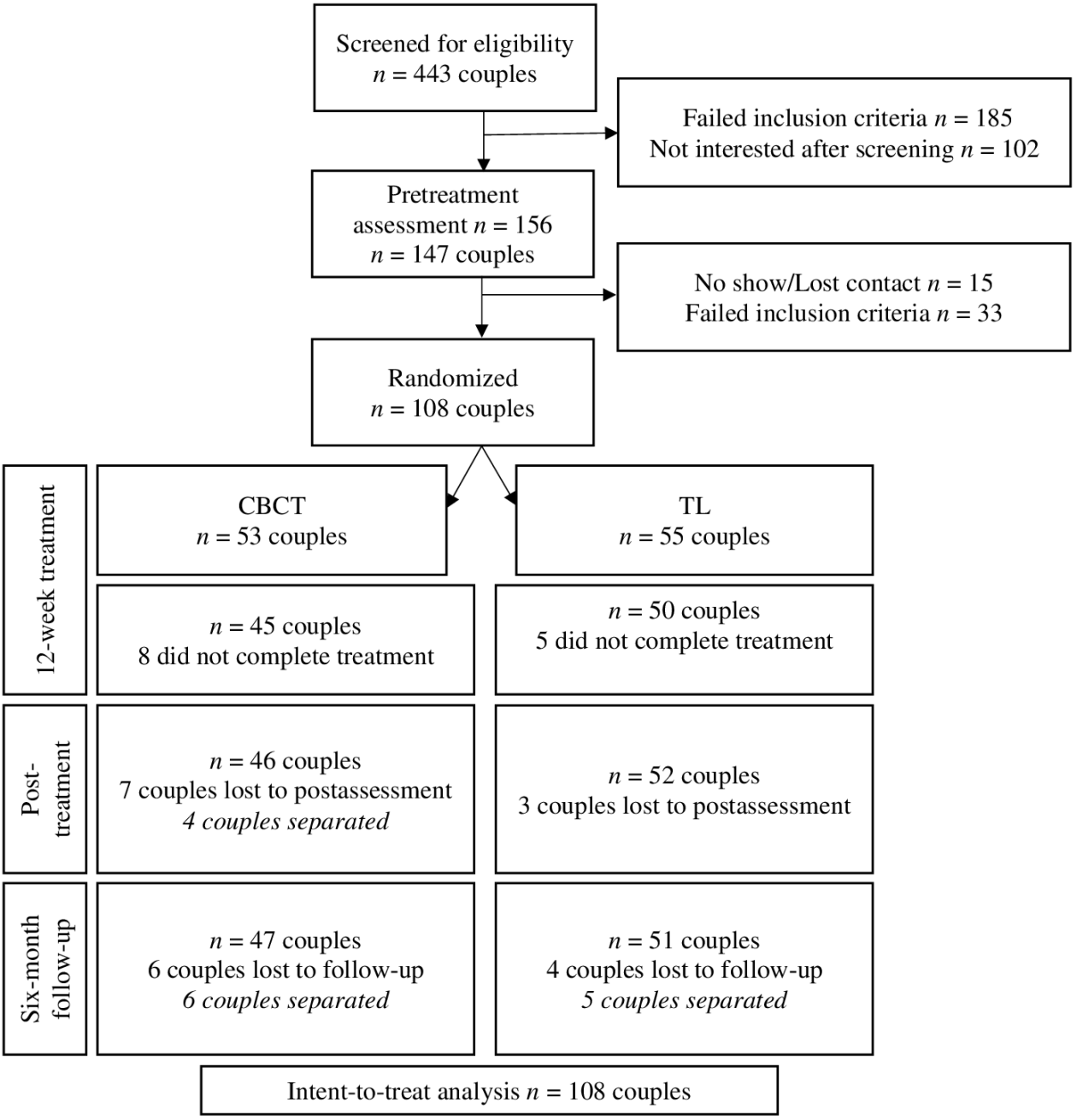
Multilevel Model for the Associations Between Childhood Maltreatment and Study Outcomes

	Model 4: Sexual Satisfaction					
Level-1	b (SE)	*Z*	*p*	b (SE)	*Z*	*p*
Intercept	22.16 (0.61)	36.28	.000			
Time (T1-T2)	4.30 (0.65)	6.66	.000			
Time (T1-T3)	2.69 (0.66)	4.07	.000			
Level-2	**Effect on time T1-T2 slope**			**Effect on time T1-T3 slope**		
Treatment condition	2.05 (1.30)	1.57	.116	0.08 (1.33)	0.06	.952
CM	0.00 (0.06)	0.08	.939	0.03 (0.06)	0.47	.640
Treatment condition × CM[a]	-0.18 (0.12)	-1.60	.110	**-0.26 (0.12)**	**-2.22**	**.027**
	Model 5: Sexual distress					
Level-1	b (SE)	*Z*	*p*	b (SE)	*Z*	*p*
Intercept	33.21 (0.98)	33.94	.000			
Time (T1-T2)	-8.51 (1.12)	-7.59	.000			
Time (T1-T3)	-9.42 (1.20)	-7.83	.000			
Level-2	**Effect on time T1-T2 slope**			**Effect on time T1-T3 slope**		
Treatment condition	**-7.27 (2.20)**	**-3.30**	**.001**	-1.87 (2.37)	-0.79	.429
CM	0.00 (0.09)	0.05	.962	-0.06 (0.10)	-0.56	.578
	Model 6: Sexual function					
Level-1	b (SE)	*Z*	*p*	b (SE)	*Z*	*p*
Intercept	19.72 (0.48)	40.97	.000			
Time (T1-T2)	3.02 (0.52)	5.79	.000			
Time (T1-T3)	3.36 (0.54)	6.23	.000			
Level-2	**Effect on time T1-T2 slope**			**Effect on time T1-T3 slope**		
Treatment condition	0.83 (1.05)	0.79	.431	-0.63 (1.09)	-0.57	.566
Childhood maltreatment	-0.05 (0.05)	-1.03	.301	0.00 (0.05)	0.03	.973
Treatment condition × CM[a]	**-0.19 (0.09)**	**-2.04**	**.042**	**-0.24 (0.10)**	**-2.48**	**.013**

Note. Recruitment site: 0.5 = Site A and -0.5 = Site B; Treatment condition: -0.5 = Topical Lidocaine and 0.5 = CBCT. CM = childhood maltreatment. [a]See Figures 4 and 5 for results of tests of simple effects.

Figure 1.

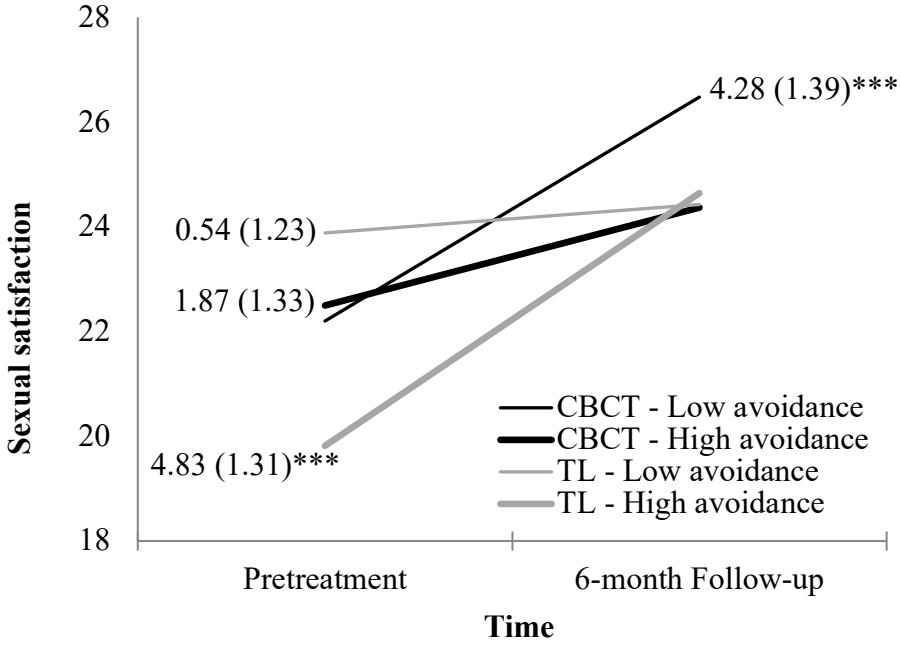
Flow Chart of Participants in the Study



Note. CBCT = Cognitive-behavioral couple therapy. TL = Topical lidocaine.

Figure 2

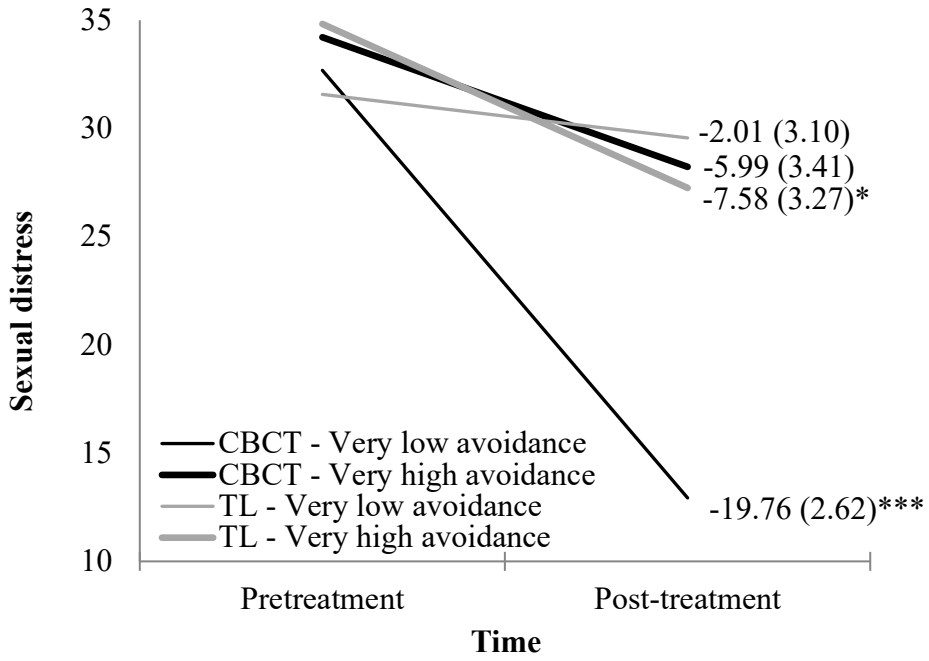
Interaction Between Time, Treatment Condition and Attachment Avoidance on Sexual Satisfaction



Note. CBCT = cognitive-behavioral couple therapy. TL = Topical lidocaine. *** $p < .001$.

Figure 3

Interaction Between Time, Treatment Condition and Attachment Avoidance on Sexual Distress

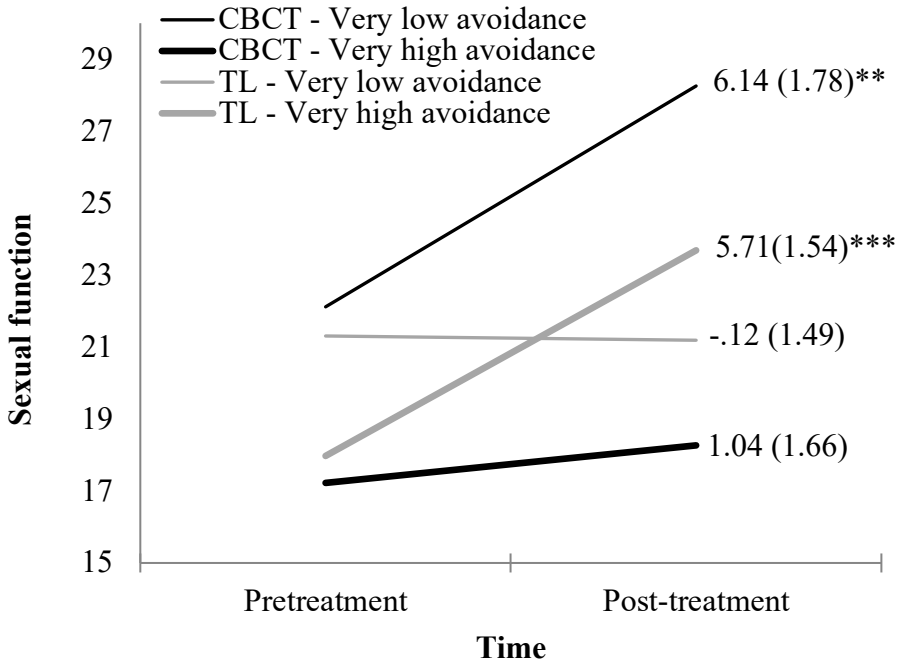


Note. CBCT = cognitive-behavioral couple therapy. TL = Topical lidocaine. * $p < .05$; *** $p < .001$.

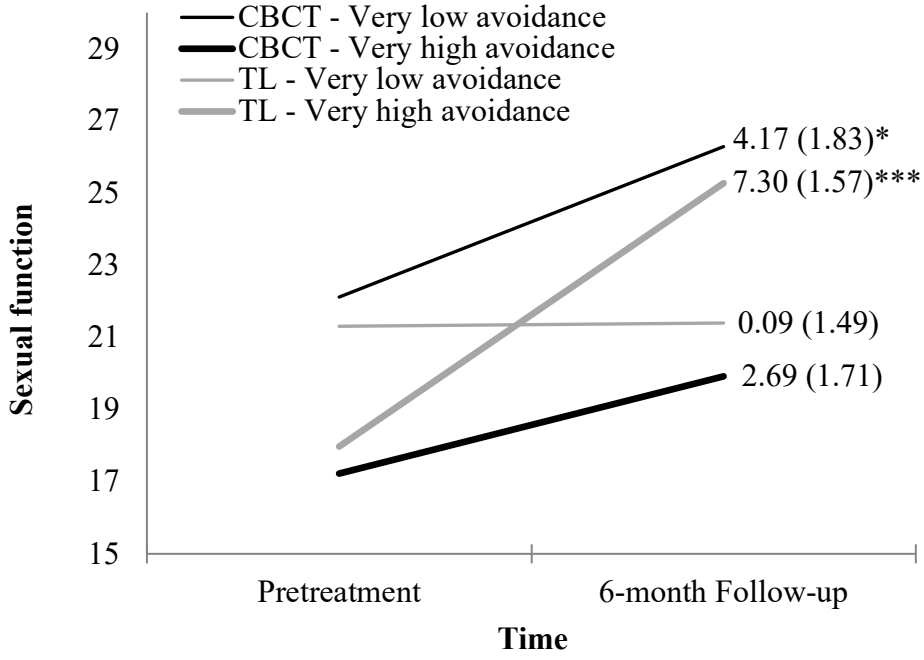
Figure 4

Interaction Between Time, Treatment Condition and Attachment Avoidance on Sexual Function

(a)



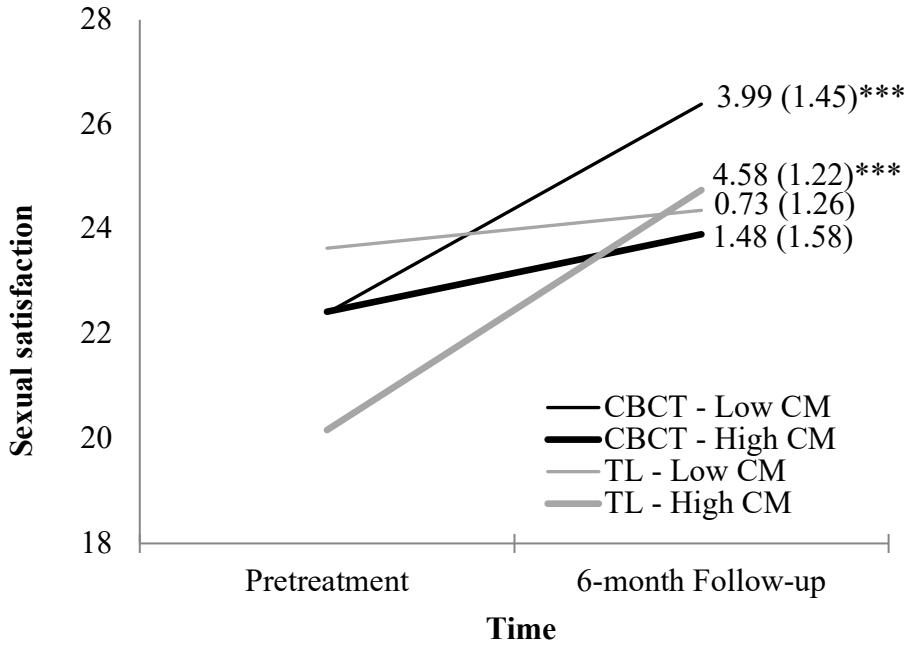
(b)



Note. CBCT = cognitive-behavioral couple therapy. TL = Topical lidocaine. * $p < .05$; ** $p < .01$; *** $p < .001$.

Figure 5

Interaction Between Time, Treatment Condition and Childhood Maltreatment on Sexual Satisfaction

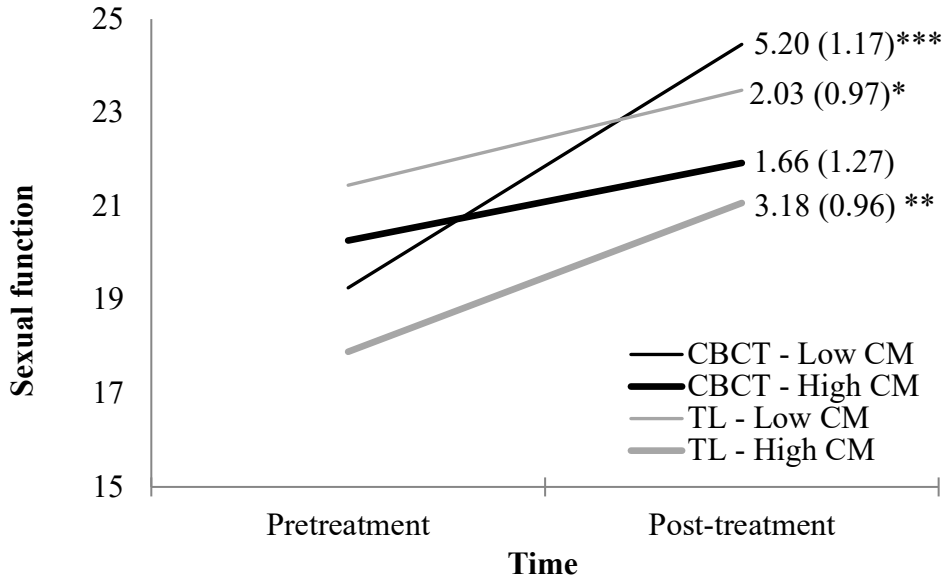


Note. CBCT = cognitive-behavioral couple therapy. TL = Topical lidocaine. CM = childhood maltreatment. *** $p < .001$.

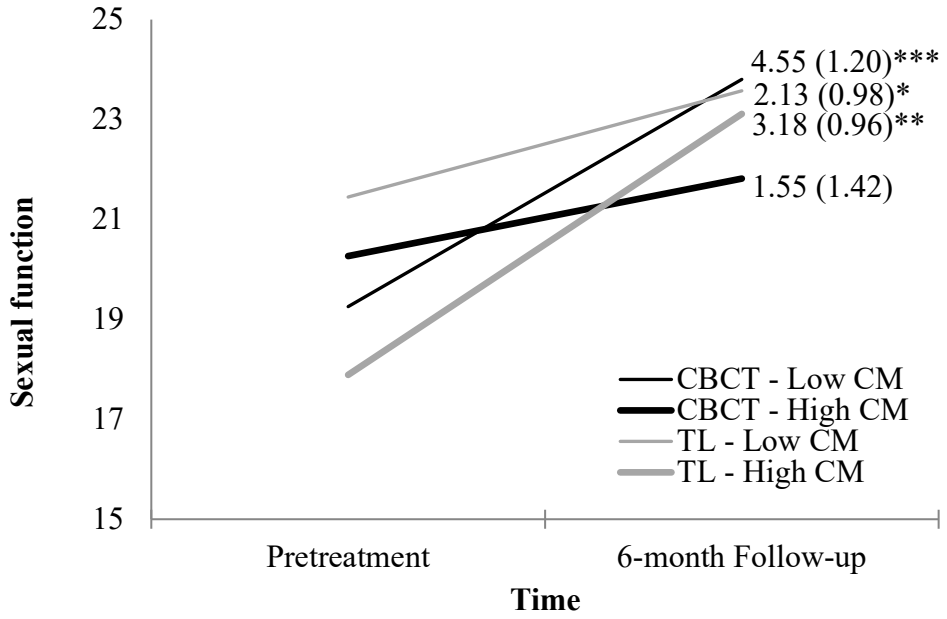
Figure 6

Interaction Between Time, Treatment Condition and Childhood Maltreatment on Sexual Function

(a)



(b)



Note. CBCT = cognitive-behavioral couple therapy. TL = Topical lidocaine. CM = Childhood maltreatment. * $p < .05$; ** $p < .01$; *** $p < .001$.

CHAPITRE V : DISCUSSION GÉNÉRALE

Résumé des objectifs de la thèse

L'objectif général de la présente thèse était d'examiner le rôle de l'attachement amoureux dans l'ajustement et le traitement des femmes présentant de la douleur génito-pelvienne et leur partenaire amoureux. Selon le *Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme* (Rosen & Bergeron, 2019), plusieurs facteurs interpersonnels proximaux et distaux affecteraient la capacité des couples à faire face à une dysfonction sexuelle, ce qui aurait en retour des impacts sur leur bien-être sexuel, physique et psychologique. La thèse a examiné l'attachement, un facteur interpersonnel distal peu étudié chez les femmes avec la VP, et ses corolaires en employant des méthodologies longitudinales et dyadiques. Plus précisément, la thèse, comprenant trois articles scientifiques publiés, visait à comprendre le rôle de l'attachement dans le maintien de la douleur dans le temps, dans les interactions de couple entourant la douleur et dans le traitement de la douleur associée à la VP.

Premier article

Le premier article examinait de manière longitudinale et dyadique les associations entre l'attachement, le sentiment d'auto-efficacité face à la douleur et l'intensité de la douleur sur une période de deux ans. Le devis longitudinal de cet article apportait un aspect novateur à l'examen de ces variables en permettant d'examiner le rôle de l'attachement amoureux de manière prospective et de déterminer la direction des associations entre les variables observées. L'inclusion des partenaires amoureux comblait une lacune de la littérature actuelle en permettant d'examiner l'impact d'un partenaire sur l'ajustement de l'autre dans un contexte où les deux membres du couple sont affectés par la problématique rencontrée, la VP. Pour cet article, il était

attendu que le sentiment d'auto-efficacité dans la gestion de la douleur chez les deux membres du couple agisse comme médiateur entre l'insécurité d'attachement (i.e. anxiété d'abandon ou évitement de l'intimité) de chacun et l'intensité de la douleur chez les femmes.

Les résultats de cet article ont indiqué que des niveaux plus élevés d'anxiété d'abandon et d'évitement de l'intimité chez les femmes avec la VP étaient des prédicteurs d'un niveau plus élevé de douleur deux ans plus tard. Les dimensions d'attachement des partenaires amoureux n'étaient pas associées à l'intensité de la douleur des femmes deux ans plus tard. Un niveau plus élevé d'anxiété d'abandon chez la femme était également un prédicteur d'un plus faible sentiment d'auto-efficacité dans la gestion de la douleur deux ans plus tard chez celles-ci, mais pas chez leurs partenaires amoureux. L'évitement de l'intimité des femmes avec la VP et les deux dimensions de l'attachement chez leurs partenaires amoureux n'étaient pas associés au sentiment d'auto-efficacité d'aucun des deux membres du couple. Enfin, le sentiment plus faible d'auto-efficacité dans la gestion de la douleur des femmes avec la VP, mais pas des partenaires, était associé à une intensité de la douleur plus élevée deux ans plus tard. Enfin, en examinant ces résultats dans un modèle de médiation, les résultats ont démontré que le sentiment d'auto-efficacité chez les femmes avec la VP était un médiateur significatif des associations entre leur anxiété d'abandon et l'intensité de leur douleur deux ans plus tard. Cet article démontre que l'insécurité d'attachement affecte la perception qu'ont les femmes de leur capacité à gérer leur douleur, pouvant contribuer ultimement au maintien de la douleur dans le temps. Les résultats de cet article corroborent partiellement ceux de la littérature dans le domaine de la douleur chronique, où les résultats en ce qui a trait aux femmes avec la VP sont cohérents avec les hypothèses de départ, mais où il était attendu que des associations significatives soient trouvées pour les partenaires amoureux. Cet article permet d'appuyer les modèles théoriques suggérant

que l'insécurité d'attachement affecte l'évolution de la douleur à travers certains mécanismes d'adaptation, et est le premier à vérifier ces associations de manière prospective.

Deuxième article

Le second article avait comme objectif d'examiner le rôle de l'attachement dans les interactions de couple entourant la VP lors des relations sexuelles en examinant les réponses comportementales des partenaires comme médiateurs entre les dimensions de l'attachement et le bien-être sexuel et relationnel des deux membres du couple. Cette étude est l'une des seules à examiner les associations entre l'attachement et les réponses des partenaires à la douleur chronique et la première à le faire en utilisant un devis dyadique. De plus, elle est seulement la deuxième étude se penchant sur les prédicteurs des réponses des partenaires chez les couples avec la VP (Davis, Bergeron, Bois, et al., 2015). Il était attendu que l'insécurité d'attachement chez les femmes avec la VP ferait en sorte qu'elles perçoivent plus de réponses négatives et moins de réponses facilitatrices de la part de leur partenaire, ce qui en retour serait associé à une plus faible satisfaction sexuelle et relationnelle et à davantage de détresse sexuelle chez les deux membres du couple. Dans le même ordre d'idée, il était attendu que les partenaires avec davantage d'insécurité d'attachement émettent plus de réponses négatives et moins de réponses facilitatrices, ce qui serait associé à un bien-être relationnel et sexuel amoindri pour le couple. Comme aucune étude à ce jour n'a examiné les liens entre l'attachement et les réponses des partenaires dans un contexte dyadique, les effets partenaires de ces associations ont été testés de manière exploratoire.

Cette étude a démontré que lorsque les femmes ou les partenaires rapportaient des niveaux plus élevés d'anxiété d'abandon, les femmes percevaient davantage de réponses négatives de la part de leur partenaire amoureux, ce qui en retour était associé à un plus faible

bien-être relationnel et sexuel chez les deux membres du couple. De plus, lorsque les partenaires rapportaient des niveaux d'anxiété d'abandon plus élevés, ils rapportaient également émettre des réponses négatives plus fréquemment, ce qui était associé à leur plus faible satisfaction relationnelle, mais à une plus grande satisfaction relationnelle chez les femmes avec la VP. Lorsque les partenaires amoureux des femmes avec la VP rapportaient des niveaux plus élevés d'évitement de l'intimité, ils rapportaient fournir moins de réponses facilitatrices, ce qui en retour était associé à leur plus faible satisfaction sexuelle et relationnelle. Enfin, l'évitement de l'intimité chez les femmes avec la VP était associé à une perception des réponses négatives accrues de la part de leur partenaire, ce qui était associé à leur plus grande détresse sexuelle et à une satisfaction relationnelle amoindrie.

Cet article démontre que l'insécurité d'attachement, un facteur distal, est liée à des interactions moins adaptatives chez les couples avec la VP, ce qui ultimement peut nuire à leur bien-être sexuel et relationnel. Cet article soutient les modèles théoriques dans le domaine de la douleur chronique et contribue significativement à la littérature dans ce domaine en étant le premier à examiner de manière dyadique les associations entre l'attachement et les interactions des couples entourant la douleur chronique – dans le présent cas la VP.

Troisième article

Le troisième article de la thèse avait comme objectif d'examiner l'attachement et la maltraitance à l'enfance comme modérateurs de l'efficacité thérapeutique en comparant deux traitements pour la VP, soit une TCCC pour la VP et l'application quotidienne de lidocaïne topique. L'identification de variables modératrices dans un ECR permet de déterminer l'efficacité d'un traitement selon la présentation clinique des individus, ce qui permet ultimement d'offrir des soins en adéquation avec celle-ci et incidemment d'améliorer l'efficacité

thérapeutique dans le traitement de la VP. Il était attendu que les femmes avec plus d'insécurité d'attachement ou un historique de maltraitance à l'enfance bénéficieraient moins de la TCCC que de la lidocaïne topique.

Les résultats de cet article ont démontré que les femmes avec la VP avec des niveaux élevés ou très élevés d'évitement de l'intimité bénéficiaient davantage de la lidocaïne topique que de la TCCC en rapportant une plus grande amélioration de leur satisfaction, leur détresse et leur fonction sexuelles à la fin du traitement et/ou 6 mois après la fin de celui-ci. De façon similaire, les femmes avec la VP avec des niveaux plus élevés de maltraitance à l'enfance bénéficiaient moins de la TCCC que de la lidocaïne topique sur le plan de la satisfaction et de la fonction sexuelle à la fin du traitement et/ou 6 mois après la fin de celui-ci.

Cet article démontre que l'insécurité d'attachement et la maltraitance à l'enfance, deux facteurs interpersonnels distaux liés à la capacité d'entrer en intimité et aux habiletés de régulation émotionnelle, peuvent affecter l'efficacité thérapeutique des traitements pour la VP. Ces résultats appuient les quelques études antérieures dans le domaine du traitement de la santé mentale ou des douleurs chroniques qui soulignent que l'attachement et la maltraitance à l'enfance affectent l'adhérence au traitement, l'alliance thérapeutique, la confiance envers le système et les professionnels de la santé, et la capacité à réguler la détresse émotionnelle suscitée par leur problématique. Cet article contribue significativement à la littérature portant sur le traitement de la VP en étant le deuxième à identifier des modérateurs de traitement de la VP (Rosen et al., 2021). Il permettra aux professionnels d'orienter les femmes avec la VP vers un traitement adéquat selon leur présentation clinique, ce qui ultimement affectera l'efficacité des traitements qui leurs sont présentés.

Implications des résultats

Attachement et évolution de la douleur génito-pelvienne dans le temps. Les résultats du premier article de cette thèse indiquent que les deux dimensions de l'attachement, soit l'évitement de l'intimité et l'anxiété d'abandon, étaient des prédicteurs significatifs de la douleur deux ans plus tard. Ce résultat est similaire à ceux des recherches antérieures dans le domaine de la VP et de la douleur chronique et appuie les modèles théoriques suggérant que l'insécurité d'attachement puisse contribuer à la chronicisation et au maintien de la douleur dans le temps.

À ce jour, seulement deux études ont examiné à l'aide d'un devis transversal les associations entre l'insécurité d'attachement et la douleur chez les femmes avec la VP, et trouvent des résultats peu concluants. L'étude de Granot et al. (2010) a trouvé que l'évitement de l'intimité était associé à des niveaux plus élevés de douleur chez les femmes avec la VP alors que l'étude de Leclerc et al. (2015) n'a trouvé aucune association entre les dimensions d'attachement et l'intensité de la douleur. Il se pourrait que les résultats contradictoires à cet effet soient en partie dus à la méthodologie employée dans ces deux études.

En effet, l'étude de Granot et al. (2010) comporte des failles méthodologiques importantes venant compromettre les résultats rapportés, notamment en ce qui a trait à la représentativité de cet échantillon. En effet, aucune information n'est rapportée quant à l'évaluation diagnostique ou la douleur moyenne des femmes composant cet échantillon.

Dans l'étude de Leclerc et al. (2015), les femmes devaient rapporter un niveau de douleur supérieur à un score de quatre sur dix afin d'être éligibles à prendre part à l'étude, ce qui amène une grande homogénéité au sein de l'échantillon. En effet, ces femmes pourraient présenter des caractéristiques prototypiques comme davantage de détresse liée à leur douleur ou encore une douleur plus importante que celles ne se sentant pas interpellées par l'étude. Cette homogénéité pourrait faire en sorte qu'il n'y ait pas suffisamment de puissance statistique pour détecter un

effet significatif de l'attachement sur l'intensité de la douleur due à une fable variabilité au sein de l'échantillon au début de l'étude.

Conséquemment, l'échantillon de l'article 1 recoupant en partie celui de Leclerc et al. (2015), la première étude de la présente thèse n'a trouvé aucune association significative entre les dimensions de l'attachement et l'intensité de la douleur au temps 1. Alors que la douleur moyenne des femmes à ce temps de mesure était similaire à celle de l'étude de Leclerc et al. (2015), on note davantage de variabilité au sein de la variable de l'intensité de la douleur au temps 2. Cette plus grande variabilité pourrait faire en sorte que nous avons détecté des associations significatives entre l'attachement et l'intensité de la douleur au temps 2 de l'étude.

Ces résultats illustrent comment l'attachement, mesuré de façon statique, pourrait ne pas être directement associé à l'intensité de la douleur, mais affecterait plutôt l'ajustement et l'adaptation des individus à la douleur chronique à travers différents mécanismes et différentes stratégies d'adaptation qui se déploient à travers le temps. Ceci pourrait donc faire en sorte que les associations entre l'attachement et l'intensité de la douleur seraient uniquement détectables après une certaine période de temps.

Cette interprétation est en lien avec le *Modèle Attachement-Diathèse de la Douleur Chronique* de Meredith et al. (2008) qui suggère que l'insécurité d'attachement est associée au développement, au maintien et à l'aggravation de la douleur chronique dans le temps à travers différents mécanismes explicatifs. En effet, ce modèle stipule que l'attachement influence la perception de la douleur comme étant quelque chose de plus ou moins menaçant, la perception de soi comme étant en mesure ou non de gérer la douleur, et la perception des autres et du monde comme étant enclins à nous soutenir dans cette difficulté. Ces perceptions affecteraient ensuite la réponse émotionnelle vis-à-vis la douleur, la mobilisation des individus dans la gestion de leur

douleur et la recherche d'aide et de soutien dans leur environnement. Les individus non sécurisés percevraient la douleur comme étant davantage menaçante et auraient plus de difficulté à déployer des stratégies d'adaptation et de recherche de soutien pour gérer leur douleur en raison d'une vision de soi comme étant incompétents et une vision des autres comme étant peu enclins à les aider. Ceci contribuerait ultimement à la chronicisation et au maintien de la douleur dans le temps, ce qui pourrait également être le cas chez les femmes avec la VP. En effet, l'insécurité d'attachement chez les femmes avec la VP pourrait faire en sorte que ces dernières perçoivent leur douleur comme étant plus menaçante, d'autant plus qu'elle survienne dans un contexte de sexualité, qu'elles se perçoivent comme étant moins compétentes pour gérer leur douleur et qu'elles perçoivent leur partenaire comme étant moins enclin à les aider à s'ajuster à la douleur génito-pelvienne. Tel que démontré dans la première étude de cette thèse, ceci pourrait avoir comme effet de perpétuer la douleur dans le temps.

D'ailleurs, les études auprès des populations de douleur chronique démontrent des résultats mitigés quant aux associations entre les deux dimensions de l'insécurité d'attachement et l'intensité de la douleur, où certaines trouvent des associations significatives alors que d'autres non (Kratz et al., 2012; Meredith et al., 2005, 2006). Plusieurs auteurs soutiennent que ces incohérences seraient dues au fait que l'attachement, plutôt que d'être lié à l'intensité de la douleur, serait plutôt lié à l'évolution de la douleur dans le temps par l'entremise de plusieurs mécanismes d'adaptations plus ou moins efficaces (Meredith et al., 2008; Meredith & Strong, 2019; Romeo et al., 2017). Ainsi, lorsque mesurées de façon transversale, il se pourrait que les associations entre l'insécurité d'attachement et l'intensité de la douleur soient indétectables, mais que l'usage d'un devis longitudinal permette de mesurer indirectement le déploiement de ces mécanismes d'adaptation.

Le *Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme* (Rosen & Bergeron, 2019) appuie d'ailleurs cette idée et identifie l'insécurité d'attachement comme un facteur interpersonnel distal qui ferait en sorte que les femmes et/ou leurs partenaires auraient davantage tendance à adopter des stratégies de régulation émotionnelle qui ont des impacts délétères sur leur adaptation à la douleur génito-pelvienne, incluant sur la persistance de la douleur. En effet, ce modèle postule que les femmes et/ou les partenaires avec davantage d'évitement de l'intimité pourraient avoir de la difficulté à exprimer leur détresse associée à leur expérience douloureuse, à s'appuyer l'un sur l'autre pour obtenir du soutien et à offrir leur soutien à l'autre, pouvant perpétuer les problèmes sexuels du couple. Quant à eux, les femmes avec la VP et/ou leur partenaire avec davantage d'anxiété d'abandon pourraient percevoir la douleur comme étant menaçante pour la pérennité de la relation, menant à de l'hypervigilance quant à la présence de la douleur, à des pensées catastrophiques et à une sur-responsabilisation par rapport à la douleur, menant également à un plus faible bien-être sexuel (Rosen & Bergeron, 2019). À ce jour, seulement trois études ont examiné de manière transversale l'attachement chez les partenaires amoureux des individus avec de la douleur chronique (Leclerc et al., 2015; Monin et al., 2014), avec l'une seule d'entre elles examinant les associations avec l'intensité de la douleur (Porter et al., 2012). Cette dernière démontre qu'en contrôlant pour les dimensions de l'attachement chez l'individu avec de la douleur chronique, l'évitement de l'intimité chez le partenaire est associé à une intensité de la douleur plus élevée.

En contradiction partielle avec le *Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme*, les résultats du premier article de la thèse ne démontrent pas d'association significative entre l'attachement des partenaires amoureux et l'évolution de la douleur. Il se pourrait que l'effet de l'attachement des partenaires ne surpasse pas celui de

femmes avec la VP, faisant en sorte que seul l'attachement des femmes soit un prédicteur significatif de l'intensité de la douleur. Tel qu'étayé par Romeo et al. (2017), il se pourrait que l'insécurité d'attachement des partenaires amoureux soit indirectement liée à l'intensité de la douleur par l'entremise de processus interpersonnels plus complexes, comme ceux associés au soutien offert, aux processus de régulation émotionnelle et à ceux de co-régulation de la gestion de la douleur.

Attachement et réponses des partenaires. Le second article de cette thèse a trouvé des associations significatives entre l'insécurité d'attachement chez les deux membres du couple et les réponses des partenaires telles que perçues par les femmes et rapportées par les partenaires. Cette étude est la première à examiner les associations entre l'attachement et les réponses des partenaires chez les couples avec la VP, avec seulement deux études ayant examiné précédemment ces associations dans des échantillons d'individus avec de la douleur chronique (Forsythe et al., 2012; Gauthier et al., 2012).

Cette étude a d'abord trouvé que des niveaux plus élevés d'anxiété d'abandon chez les femmes avec la VP étaient associés à une perception accrue de réponses négatives de la part de leur partenaire, menant à un plus faible bien-être sexuel et relationnel chez les deux membres du couple. Ces résultats sont en lien avec les modèles théoriques qui suggèrent que l'anxiété d'abandon est associée à des stratégies d'hyperactivation émotionnelle lorsque le lien d'attachement est menacé, tel qu'il peut l'être par la présence de la VP (Rosen & Bergeron, 2019). Les stratégies d'hyperactivation ont comme objectif de maintenir la figure d'attachement à proximité et incluent l'hypervigilance aux signaux de rejet ou d'abandon, pouvant expliquer ce qui ferait en sorte que les femmes avec la VP soient davantage susceptibles de percevoir des signes d'hostilité de la part de leur partenaire amoureux. En ce sens, les deux seules études

examinant ces associations ont trouvé que l'anxiété d'abandon était associée à une perception accrue des réponses négatives chez des individus avec de la douleur chronique (Forsythe et al., 2012; Gauthier et al., 2012). De plus, l'anxiété d'abandon est associée à un plus fort sentiment d'être un fardeau pour le partenaire amoureux chez les individus avec de la douleur chronique (Kowal et al., 2012), reflétant l'implication de cette dimension de l'attachement dans la perception de soi comme étant défaillant ou peu méritant de l'amour et des soins des autres.

Les stratégies d'hyperactivation émotionnelle incluent également l'expression accrue de détresse émotionnelle dans le but d'attirer l'attention et d'éliciter une réponse de soutien de la part de la figure d'attachement (Mikulincer & Shaver, 2003). Ainsi, il se pourrait que les femmes avec la VP qui présentent davantage d'anxiété d'abandon montrent des signaux de détresse qui puissent être irritants pour leur partenaire amoureux, les amenant à percevoir ces derniers comme étant plus hostiles. D'ailleurs, le Communal Coping Model (Thorn et al., 2003) se fonde sur cette idée en suggérant que la perception de la douleur comme catastrophique et son expression exagérée aurait comme fonction d'assurer la gestion de la douleur chronique par l'entremise du soutien interpersonnel que ces stratégies procurent. Les études démontrent d'ailleurs que l'insécurité d'attachement est associée au catastrophisme et à la perception de la douleur comme une menace (Gauthier et al., 2012; Meredith et al., 2005; Tremblay & Sullivan, 2010), et que l'expression exagérée de la détresse émotionnelle qui s'y rattache influence les interactions des couples. En effet, des études transversales et à journaux quotidiens démontrent que le catastrophisme entourant la douleur est associé à une perception augmentée de critiques et de réponses hostiles chez les partenaires amoureux (Boothby et al., 2004; Sullivan, 2012), mais aussi à davantage de réponses hostiles autorapportées par les partenaires (Burns et al., 2015). Bien que le catastrophisme n'ait pas été mesuré au sein de notre étude, les résultats observés

abondent dans le même sens que le Communal Coping Model en appuyant l'idée que les stratégies d'hyperactivation émotionnelle associée à l'anxiété d'abandon chez les femmes avec la VP puissent avoir comme fonction d'éliciter le soutien des partenaires amoureux, mais mènent à des interactions plus houleuses chez les couples, qui ultimement nuiraient à leur bien-être.

L'évitement de l'intimité chez les femmes avec la VP était également associé à une perception accrue de réponses négatives de la part de leur partenaire amoureux. L'évitement de l'intimité est associé à une sur-indépendance qui pourrait porter à croire que les individus qui sont élevés sur cette dimension pourraient être inébranlables, voire stoïques face à l'expression d'hostilité de la part de leur partenaire. Toutefois, Bartholomew (1990) étaye brillamment l'idée selon laquelle les personnes qui sont plus élevées sur la dimension de l'évitement de l'intimité auraient la motivation de *ne pas* dépendre des autres, plutôt qu'un désintérêt envers les relations interpersonnelles. Cette nuance affecte largement l'expérience interne des individus, où ceux qui sont plus évitants peuvent entretenir des biais perceptuels qui confirment leur idée qu'ils ne devraient pas s'appuyer sur les autres. En ce sens, les femmes avec la VP qui ont des niveaux plus élevés d'évitement de l'intimité pourraient être plus sensibles aux signaux de rejet qui appuient leur motivation à maintenir leur partenaire à distance, plutôt que d'être émotionnellement désengagée des réactions de leur partenaire.

En ce qui concerne les partenaires amoureux, lorsqu'ils rapportaient davantage d'anxiété d'abandon, des niveaux plus élevés de réponses négatives étaient rapportés autant par eux que par les femmes avec la VP. Ce résultat fait écho à ceux de Davis, Bergeron, Sadikaj, et al. (2015) qui ont trouvé que le catastrophisme chez les partenaires des femmes avec la VP était associé à davantage de réponses négatives autorapportées. En effet, tout comme pour les femmes avec la VP, l'anxiété d'abandon chez les partenaires peut être associée à des stratégies d'hyperactivation

émotionnelle qui amènent l'expression accrue de la détresse émotionnelle. La sexualité occupant une fonction importante dans le maintien du lien d'attachement, particulièrement chez les individus avec plus d'anxiété d'abandon, la présence de la VP pourrait être perçue comme plus menaçante pour les partenaires moins sécurisés (Birnbaum & Reis, 2019). Des études expérimentales démontrent que l'anxiété d'abandon et le catastrophisme sont associés à une perception accrue des signaux de douleur chez les autres, incluant chez un partenaire amoureux (Monin et al., 2010; Sullivan et al., 2006). Chez les couples avec la VP, il se pourrait que les partenaires amoureux avec davantage d'anxiété d'abandon aient une perception amplifiée de la douleur associée à la VP, les amenant à vivre davantage de frustration associée à l'entrave que pose la VP sur leur sexualité et conséquemment sur les fonctions d'attachement qu'elle remplit.

Enfin, lorsque les partenaires amoureux rapportaient davantage d'évitement de l'intimité, ils indiquaient émettre moins de réponses facilitatrices, ce qui ultimement nuisait au bien-être du couple. Ceci est également en lien avec les modèles qui suggèrent que l'évitement de l'intimité est associé à des stratégies de désactivation émotionnelle qui visent à prôner l'autosuffisance (Mikulincer & Shaver, 2003). Les réponses facilitatrices (embrasser, dire qu'on aime notre partenaire, exprimer du plaisir lié au fait de s'engager dans des activités sexuelles, etc.) peuvent avoir comme effet d'encourager l'adaptation du couple à la douleur et inviter le rapprochement émotionnel, ce qui entre en contradiction avec les motivations à éviter l'interdépendance dans la relation de couple pour les individus avec davantage d'évitement de l'intimité. Ainsi, dans le contexte de la VP, les partenaires plus évitants de l'intimité pourraient chercher à limiter ce type de réponse afin de préserver un sentiment d'indépendance, aux dépens de leur bien-être sexuel et relationnel.

Bien que plusieurs études se soient penchées sur l'impact des réponses des partenaires sur l'ajustement des couples à la douleur génito-pelvienne, à ce jour une seule étude a examiné les antécédents de ces réponses, soit le catastrophisme et les attributions des partenaires amoureux des femmes avec la VP (Davis, Bergeron, Sadikaj, et al., 2015). De plus, les études examinant les associations entre l'attachement et les réponses des partenaires dans des échantillons de douleur chronique l'ont fait en examinant uniquement la perception des réponses selon la perspective du patient. Ainsi, la présente étude contribue significativement à la littérature en permettant une compréhension plus approfondie des réponses des partenaires à la présence de VP en les examinant à travers la perspective de l'attachement et avec un devis dyadique.

Attachement et bien-être sexuel des couples avec la VP. La présente thèse démontre des associations directes et indirectes entre l'attachement et la fonction sexuelle des femmes avec la VP et la satisfaction sexuelle des deux membres du couple. Plus spécifiquement elle démontre des associations directes entre l'évitement de l'intimité chez la femme et chez leur partenaire et une moindre satisfaction sexuelle, et entre l'anxiété d'abandon chez les deux membres du couple et une plus faible satisfaction sexuelle par l'entremise d'une perception accrue des réponses négatives des partenaires. Elle est la première à examiner les liens entre l'attachement et la détresse sexuelle chez les couples avec la VP et démontre des associations directes significatives entre l'anxiété d'abandon des deux membres du couple et leur détresse sexuelle, et des liens indirects entre l'anxiété d'abandon des deux membres du couple et la détresse sexuelle via davantage de réponses négatives des partenaires. Les résultats de cette thèse contribuent de manière significative à la littérature portant sur les dysfonctions sexuelles en contemplant l'attachement comme pierre angulaire pour comprendre les difficultés sexuelles des couples avec la VP.

D’un point de vue théorique, il existe un consensus quant à l’interdépendance des systèmes sexuels et d’attachement, où l’orientation d’attachement d’un individu teinte l’expérience de sa sexualité et où la sexualité remplit des fonctions et des besoins différents selon l’attachement d’une personne (Birnbaum, 2010; Birnbaum & Reis, 2019; Péloquin et al., 2014; Shaver & Mikulincer, 2006). En effet, chez des individus présentant un attachement plus sécurisé, la sexualité est empreinte de confiance, de bienveillance mutuelle et de plaisir partagé et remplit la fonction d’éprouver du plaisir, de partager l’intimité et d’exprimer de l’amour envers son partenaire (Gewirtz-Meydan & Finzi-Dottan, 2018). Chez les individus avec davantage d’insécurité d’attachement, la sexualité est teintée par les stratégies d’hyperactivation et de désactivation émotionnelle, et les motivations à s’engager envers la sexualité sont différentes (Gewirtz-Meydan & Finzi-Dottan, 2018; Mikulincer & Shaver, 2011). En effet, l’hyperactivation émotionnelle se manifesterait par des efforts soutenus pour encourager son partenaire à avoir des relations sexuelles, d’accorder une importance accrue à la sexualité dans une relation de couple et à demeurer hypervigilant aux signaux de rejet ou de désintérêt sexuel chez les personnes ayant davantage d’anxiété d’abandon. Ces individus auraient d’ailleurs une fréquence d’activités sexuelles plus élevées que la moyenne et tendraient à s’engager dans la sexualité avec davantage de motivations extrinsèques (Brassard et al., 2007). Ainsi, les activités sexuelles auraient comme but d’éviter la perte de l’intérêt du partenaire, d’atténuer les tensions avec ce dernier, de réduire l’insécurité relationnelle, mais aussi d’encourager l’intimité et la proximité émotionnelle, et exprimer leur amour (Mikulincer & Shaver, 2016). La désactivation émotionnelle associée à l’évitement de l’intimité quant à elle mènerait à l’inhibition du désir, de l’excitation et de l’intérêt envers la sexualité, à des attitudes plus négatives envers la sexualité et à une distanciation vis-à-vis un partenaire intéressé par la sexualité. Ces individus auraient des

activités sexuelles moins fréquentes que la moyenne et leurs motivations à s'engager envers la sexualité seraient également moins orientées vers la sphère interpersonnelle, comme celles d'avoir un orgasme, de remplir ses « obligations maritales » et éviter les conséquences négatives sur la relation de couple (Brassard et al., 2007; Gewirtz-Meydan & Finzi-Dottan, 2018). L'interaction du système d'attachement et de la sexualité pourrait expliquer pourquoi les individus ayant davantage d'insécurité d'attachement vivent une sexualité moins satisfaisante (Butzer & Campbell, 2008; Davis et al., 2006; Péloquin et al., 2014) et vivent davantage de difficultés liées à la fonction sexuelle (Birnbaum, 2007; Brassard et al., 2007; Cohen & Belsky, 2008; Stefanou & McCabe, 2012).

Au meilleur de nos connaissances, seulement deux études à ce jour ont examiné l'impact de l'insécurité d'attachement sur le bien-être sexuel dans des échantillons cliniques de femmes avec une dysfonction sexuelle. Pourtant, l'insécurité d'attachement serait plus prévalente chez les individus avec des dysfonctions sexuelles, ce qui souligne la pertinence d'examiner l'impact de l'attachement sur l'ajustement de ces derniers (Ciocca et al., 2015). La première de ces deux études trouve que les femmes souffrant de vaginisme et ayant un style d'attachement évitant avaient des scores plus faibles sur une mesure de fonction sexuelle comparativement aux autres participantes (Unlubilgin et al., 2021). La seconde quant à elle trouve que l'insécurité d'attachement était associée à une plus faible satisfaction sexuelle et que l'évitement de l'intimité était associé à une plus faible fonction sexuelle chez les femmes avec la VP. L'évitement de l'intimité chez les partenaires amoureux de ces femmes était associé à une plus faible satisfaction sexuelle chez les deux membres du couple (Leclerc et al., 2015).

Les résultats de la thèse sont en concordance avec ces études et en démontrant des associations entre l'attachement et la satisfaction sexuelle des couples. En effet, il serait plausible

que tout comme les individus sans dysfonction sexuelle, les femmes et les partenaires vivant avec la VP présentent des motivations différentes envers la sexualité selon leur orientation d'attachement. Le second article démontre des associations directes entre l'évitement de l'intimité et une plus faible satisfaction sexuelle chez les deux membres du couple, tel qu'usuellement trouvé dans la population générale (Butzer & Campbell, 2008; Davis et al., 2006; Péloquin et al., 2014). Il se pourrait que les motivations, davantage centrées sur l'évitement des conflits, associées à l'évitement de l'intimité amènent les femmes avec la VP et leur partenaire à vivre leur sexualité de façon moins satisfaisante, où les couples auraient des activités sexuelles de façon plus désengagée.

Un aspect novateur de la thèse concerne l'inclusion de la détresse sexuelle comme mesure du bien-être sexuel de ces couples, une variable n'ayant jamais été mise en relation avec l'attachement jusqu'à présent. Il serait possible de croire que la détresse que suscite la présence de la VP varie selon l'attachement des membres du couple. En ce sens, une étude réalisée auprès de 200 femmes de la population générale a été menée dans le but de comprendre dans quel contexte une faible fonction sexuelle est associée à une détresse sexuelle plus élevée. Cette étude a trouvé que la douleur et la faible lubrification vaginale étaient associées à davantage de détresse sexuelle seulement chez les femmes présentant davantage d'anxiété d'abandon impliquées dans des relations dans lesquelles il y a peu d'intimité (Stephenson & Meston, 2010). En concordance avec ces résultats, le second article de la thèse trouve que l'anxiété d'abandon, autant chez les femmes avec la VP que chez leur partenaire, est associée à des niveaux plus élevés de détresse sexuelle. Ceci suggère que les individus ayant davantage d'anxiété d'abandon pourraient percevoir la VP comme une menace au lien d'attachement et comme une entrave à

l'obtention de réassurance à travers la sexualité, ce qui pourrait les amener à vivre davantage de détresse sexuelle.

Pris ensemble, les résultats de la thèse appuient la pertinence d'examiner l'interdépendance des systèmes d'attachement et sexuels chez les couples avec des dysfonctions sexuelles, en démontrant comment l'insécurité d'attachement peut amener les couples avec la VP à vivre leur sexualité de façon moins satisfaisante et plus éprouvante.

Attachement et satisfaction relationnelle des couples avec la VP. À ce jour, aucune étude n'a examiné les associations entre l'attachement et la satisfaction relationnelle des couples avec la VP. Les résultats de la présente thèse démontrent que l'évitement de l'intimité chez les deux membres du couple est directement associé à une plus faible satisfaction relationnelle de façon intra-individuelle et que l'anxiété d'abandon chez chacun est associée à une plus faible satisfaction relationnelle par l'entremise de davantage de réponses négatives entourant la VP.

Ces résultats sont cohérents avec la littérature actuelle sur l'attachement amoureux et sur la sexualité des couples. Dans un premier temps, l'insécurité d'attachement est associée à davantage d'insatisfaction relationnelle chez les couples dans la population générale (Candel & Turliuc, 2019; Mikulincer & Shaver, 2016) et serait l'un des prédicteurs les plus robustes de l'insatisfaction relationnelle à long terme (Joel et al., 2020). En effet, l'insécurité d'attachement mènerait à l'emploi de mauvaises stratégies d'adaptation, à un soutien conjugal inadéquat, à des croyances négatives vis-à-vis le partenaire amoureux et à davantage de difficultés dans la gestion des conflits (Mikulincer & Shaver, 2016). De surcroit, l'évitement de l'intimité serait associé à une plus faible sensibilité à l'autre, peu d'expressivité et de partage interpersonnel, et une tendance amoindrie à prendre soin de l'autre, alors que l'anxiété d'abandon serait quant à elle plutôt associée à une affectivité négative accrue et à une tendance intrusive à offrir et à

quémander du soutien. Il se pourrait qu'il en soit de même pour les couples avec la VP, qui vivraient des difficultés relationnelles au même titre que les couples de la population générale. En soutien à nos résultats, une étude de journaux quotidiens trouve d'ailleurs que l'anxiété d'abandon amène les individus à être plus réactifs aux fluctuations comportementales positives et négatives de leur partenaire, ce qui les amèneraient à vivre davantage d'insécurité relationnelle et incidemment d'insatisfaction relationnelle (Neff & Karney, 2009). Ce résultat est cohérent avec celui obtenu dans la thèse, où les femmes ayant davantage d'anxiété d'abandon percevraient davantage de réponses négatives chez leur partenaire amoureux, les amenant à vivre davantage d'insatisfaction relationnelle. L'évitement de l'intimité, pour sa part, pourrait être associé à d'autres mécanismes explicatifs que les réponses des partenaires, comme un faible niveau de soutien interpersonnel, par exemple (Feeney & Collins, 2019).

Jumelées au fait que l'insécurité d'attachement soit associée à une plus faible satisfaction relationnelle chez les couples, de nombreuses études démontrent une interdépendance du bien-être sexuel et relationnel des couples. En effet, les études démontrent des associations entre les difficultés et l'insatisfaction sexuelles et l'insatisfaction relationnelle dans la population générale (Butzer & Campbell, 2008; Byers, 2005; Fisher & McNulty, 2008; Joel et al., 2020). Les études dans le domaine de la VP démontrent que les couples avec la VP vivent leur sexualité de façon moins satisfaisante que les couples sans VP (Pazmany et al., 2014). Il serait plausible que les difficultés sexuelles que vivent les couples avec la VP les amènent à vivre davantage d'insatisfaction relationnelle, particulièrement chez ceux avec davantage d'insécurité d'attachement pour qui les stratégies d'adaptation et le soutien conjugal sont plus difficiles à déployer.

En effet, les modèles théoriques liant les systèmes sexuels, de *caregiving* et d'attachement soutiennent que les individus présentant davantage d'insécurité d'attachement ont tendance à avoir de la difficulté à prendre soin de leur partenaire amoureux et à se montrer soutenant et sensible à leur égard, ce qui en retour viendrait affecter négativement la satisfaction relationnelle des couples (Mikulincer & Goodman, 2006; Péloquin et al., 2014; Shaver & Mikulincer, 2006). Dans un contexte où le domaine de la sexualité est affecté par la VP, il pourrait être plus difficile pour les individus non sécurisés d'offrir leur soutien ou demander de l'aide à leur partenaire, ce qui pourrait faire en sorte qu'ils vivent davantage d'insatisfaction vis-à-vis leur relation. Au meilleur de nos connaissances, aucune étude à ce jour n'a examiné les associations entre l'attachement amoureux et la satisfaction relationnelle chez des couples avec des dysfonctions sexuelles. Toutefois, une étude auprès de 45 individus souffrant de douleur chronique rapporte également que les deux dimensions de l'attachement sont associées à une plus faible satisfaction relationnelle, suggérant qu'il peut être plus difficile pour les couples non sécurisés de s'adapter à des problèmes de santé chronique (Martel et al., 2016). Les résultats des études antérieures et de la présente thèse appuient que bien que la VP soit une dysfonction sexuelle, ses impacts dépasseraient largement ceux du champ de la sexualité et s'étendraient au bien-être relationnel des couples, surtout chez ceux qui vivent davantage d'insécurité relationnelle.

Attachement et auto-efficacité dans la gestion de la douleur. Le premier article de la présente thèse révèle que l'anxiété d'abandon prédit l'auto-efficacité dans la gestion de la douleur deux ans plus tard, qui prédit en retour l'intensité de la douleur. Ce résultat est cohérent avec le *Modèle Attachement-Diathèse de la Douleur Chronique* qui suggère que l'attachement serait associé à la douleur chronique à travers différents mécanismes explicatifs, notamment

l'auto-efficacité dans la gestion de la douleur (Meredith et al., 2008). En effet, l'auto-efficacité est identifiée comme une variable importante et étroitement liée à l'évolution de la douleur (Jackson et al., 2014), et est liée de manière transversale à l'intensité de la douleur chez les femmes avec la VP (Desrochers et al., 2009). Ainsi, les individus souffrant de douleur chronique qui ont un niveau plus élevé d'auto-efficacité dans la gestion de la douleur tendent à davantage utiliser des stratégies d'adaptation orientées sur la résolution de problème que centrées sur les émotions, ce qui favoriserait une meilleure adaptation aux problèmes de santé à long terme (Amirshamsi et al., 2022). Ce processus pourrait être plus difficile pour les individus présentant davantage d'insécurité d'attachement, comme ils tendent à utiliser de l'hyperactivation ou de la désactivation émotionnelle comme stratégies d'adaptation à des stresseurs (Mikulincer & Shaver, 2003), et pourraient être moins enclins à adopter des stratégies d'adaptation centrées sur la recherche de solution.

À ce jour, seulement deux études transversales ont examiné les associations entre l'attachement et l'auto-efficacité dans la gestion de la douleur auprès d'échantillons de douleur chronique. L'une d'elles trouve que les deux dimensions de l'attachement sont associées à un plus faible sentiment d'auto-efficacité (Meredith et al., 2006), alors que la seconde trouve, tout comme dans la présente thèse, que seulement l'anxiété d'abandon est associée à l'auto-efficacité (Martel et al., 2016). En effet, il est cohérent, sur le plan théorique, que l'anxiété d'abandon soit davantage associée à l'auto-efficacité, car cette dimension de l'attachement est plus étroitement liée à la perception de soi-même comme étant dépendant des autres et moins compétent pour affronter des embûches (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994). Les individus ayant davantage d'anxiété d'abandon pourraient se percevoir comme étant peu outillés pour faire face à des épreuves, et incidemment être moins enclins à s'engager dans la prise en

charge de leur douleur et à éviter des comportements qui pourraient potentiellement susciter de la douleur. Les résultats de la thèse suggèrent qu'il en serait de même pour les femmes avec la VP, pour qui l'anxiété d'abandon est associée de façon longitudinale à un plus faible sentiment d'auto-efficacité dans la gestion de la douleur.

De façon intéressante, et contrairement à ce qui est postulé dans le modèle théorique de Meredith et al. (2008) et trouvé dans l'étude de Meredith et al. (2006), l'évitement de l'intimité n'était pas associé à l'auto-efficacité dans la gestion de la douleur chez les femmes avec la VP. Pourtant, les individus ayant davantage d'évitement de l'intimité pourraient se sentir impuissants face à leur douleur due à leur perception des autres comme étant peu enclins à les aider et à une difficulté à faire confiance aux autres, les amenant à être réfractaires à demander de l'aide auprès de leur entourage et auprès de professionnels de la santé. Néanmoins, il se pourrait que l'effet de l'évitement de l'intimité sur le sentiment d'auto-efficacité soit moindre que celui de l'anxiété d'abandon en raison d'un sens accru d'autosuffisance. Ceci pourrait faire en sorte que les femmes avec la VP présentant des niveaux plus élevés d'évitement de l'intimité pourraient davantage se percevoir comme étant capables de prendre en charge la gestion de leur douleur de façon solitaire. C'est ce qui est proposé par l'étude de Martel et al. (2016), qui trouve que l'anxiété d'abandon, mais pas l'évitement de l'intimité, est associée à l'auto-efficacité dans la gestion de la douleur chez des individus avec de la douleur chronique. Une autre étude chez des individus avec de la douleur chronique trouve également une corrélation négative et significative entre l'anxiété d'abandon et l'auto-efficacité, mais pas avec l'évitement de l'intimité (Kowal et al., 2012). Ces études, incluant la nôtre, suggèrent que l'évitement de l'intimité pourrait être plus faiblement associé à l'auto-efficacité dans la gestion de la douleur.

La première étude de la thèse a également démontré que l'attachement chez les partenaires amoureux n'était pas associé à l'auto-efficacité dans la gestion de la douleur. Cette étude était la première à examiner les associations entre l'attachement et l'auto-efficacité chez les partenaires amoureux d'individus avec de la douleur chronique en utilisant un devis dyadique. En se basant sur les propositions de Romeo et al. (2017), l'attachement des partenaires pourrait venir affecter l'ajustement des individus avec de la douleur chronique à travers différents mécanismes explicatifs, notamment le faible sentiment d'auto-efficacité. Deux avenues pourraient venir expliquer l'absence de résultats à cet effet dans la présente thèse. Dans un premier temps, comme les femmes et les partenaires étaient inclus dans les mêmes modèles, il se pourrait que le poids des associations entre l'attachement et l'auto-efficacité des femmes surpasse celles des partenaires amoureux. En effet, certaines corrélations transversales entre les dimensions d'attachement des partenaires amoureux et l'auto-efficacité des femmes et des partenaires sont identifiées aux deux temps de mesure, suggérant que l'absence d'associations chez les partenaires relève potentiellement d'un manque de puissance statistique plutôt que d'une absence complète de lien entre ces variables. Une explication alternative serait que l'attachement des partenaires amoureux est associé à l'auto-efficacité de façon transversale, mais ne prédit pas l'évolution de l'auto-efficacité chez ces derniers ou chez les femmes avec la VP à travers le temps. En effet, il se pourrait que leur insécurité d'attachement soit moins étroitement liée à leur sentiment de confiance dans la gestion de la douleur à travers le temps comme ils ne souffrent pas eux-mêmes de douleur chronique. Ceci pourrait faire en sorte qu'ils ne se perçoivent pas comme un vecteur de changement dans la gestion de la douleur et que leurs représentations de soi ou des autres viennent peu interférer avec le sentiment de confiance qu'ils ont envers la gestion de la douleur.

Enfin, de façon transversale, l'auto-efficacité des partenaires amoureux était significativement associée à l'intensité de la douleur des femmes avec la VP. Ce dernier résultat est cohérent avec la littérature actuelle qui démontre que le sentiment d'auto-efficacité des partenaires amoureux est associé avec l'intensité de la douleur des individus souffrant de douleur chronique, incluant la VP (Nah et al., 2020; Rosen et al., 2013). Toutefois, l'auto-efficacité des partenaires amoureux n'était pas un prédicteur de l'évolution de la douleur des femmes dans le temps. La présente étude est la première à examiner les associations dyadiques entre l'auto-efficacité et l'intensité de la douleur chez les couples vivant avec la douleur chronique de façon longitudinale. Encore une fois, bien que l'auto-efficacité des partenaires soit corrélée avec l'intensité de la douleur des femmes avec la VP de façon transversale dans la présente thèse, il se pourrait que son effet sur l'évolution de la douleur dans le temps ne surpasse pas celui de l'auto-efficacité des femmes avec la VP.

Attachement comme modérateur de traitement. La présente thèse démontre que l'insécurité d'attachement, spécifiquement l'évitement de l'intimité, agit comme modérateur de traitement dans un ECR comparant la TCCC à un traitement médical de première ligne, soit l'application quotidienne de lidocaïne topique. Plus spécifiquement, le troisième article de la thèse trouve que lorsque les femmes avec la VP ont des niveaux élevés d'évitement de l'intimité, elles bénéficient davantage de la lidocaïne topique que de la TCCC pour la VP pour améliorer leur satisfaction, leur fonction et leur détresse sexuelles.

À ce jour, aucune étude n'a examiné l'attachement comme modérateur en comparant un traitement médical à la psychothérapie, faisant en sorte qu'il y ait peu de littérature pour appuyer les résultats trouvés. Cependant, les études examinant l'attachement en contexte de psychothérapie démontrent des résultats cohérents avec ceux obtenus. Ainsi, une revue de la

littérature et une méta-analyse récentes suggèrent que les dimensions d'attachement puissent agir comme modérateurs de l'efficacité thérapeutique selon le degré d'engagement interpersonnel que ces thérapies suscitent (Levy et al., 2018; Marmarosh & Wallace, 2016). Ces écrits démontrent que l'anxiété d'abandon serait associée à un meilleur succès thérapeutique dans les traitements avec une orientation plus interpersonnelle, alors que l'inverse se produirait pour la dimension de l'évitement de l'intimité (McBride et al., 2006; Strauss et al., 2017; Tasca et al., 2006). En effet, ces études dépeignent l'interaction des dimensions de l'attachement avec l'engagement interpersonnel que suscitent certaines formes de thérapies. Par ailleurs, ces études semblent suggérer que les thérapies d'orientation psychodynamique soient plus engageantes sur le plan relationnel que les thérapies de type TCC, qui sont davantage orientées vers le changement de comportements et des pensées nuisibles. Comparativement à la TCC, il serait possible de croire que les traitements médicaux soient encore moins sollicitants sur le plan interpersonnel. En effet, bien que les dimensions de l'insécurité d'attachement soient associées à un plus faible succès thérapeutique dans les traitements médicaux et que la relation avec le professionnel médical soit une variable importante dans le succès thérapeutique (Hunter & Maunder, 2015), le lien avec ce professionnel est moins soutenu et moins centré sur l'échange que dans le lien psychothérapeutique.

Ainsi, les résultats de la troisième étude de la thèse sont en cohérence avec la littérature portant sur l'attachement comme modérateur thérapeutique. En effet, il serait possible de croire que la psychothérapie prodiguée dans le contexte de l'ECR soit plus exigeante sur le plan relationnel que l'application de lidocaïne topique. Ceci est d'autant plus vrai vu le contexte thérapeutique où la thérapie est dispensée en format de couple. En effet, la TCCC pour la VP (Bergeron et al., 2021) inclut des interventions qui visent le dévoilement de soi, qui encouragent

l'accroissement de l'intimité dans le couple et qui font la promotion de l'exploration sexuelle, nécessitant une forme d'engagement de la part des deux membres du couple. Dans ce contexte, il se pourrait que les femmes présentant des niveaux élevés d'évitement de l'intimité soient inconfortables avec le degré de proximité émotionnelle et physique qu'exige ce type de thérapie et soient enclines à mettre en action les stratégies de désactivation émotionnelle qui visent à se soustraire du lien d'attachement. Ceci pourrait faire en sorte qu'elles soient moins portées à s'engager envers le traitement, à adhérer aux exercices recommandés, à se dévoiler lors des séances et à faire confiance au thérapeute (Adams et al., 2018; Sauer et al., 2010), ce qui ultimement peut nuire à l'efficacité thérapeutique. En effet, les études portant sur l'évitement de l'intimité et l'alliance thérapeutique démontrent que cette dimension de l'attachement est associée à une plus faible alliance thérapeutique (Bernecker et al., 2014), incluant en thérapie de couple (Miller et al., 2015), que celle-ci est plus longue à bâtir (Marmarosh & Wallace, 2016) et qu'elle tend à diminuer autour de la fin de la thérapie (Kanninen et al., 2000), ce qui pourrait en partie expliquer les résultats obtenus.

Les résultats de cette étude démontraient également que les femmes ayant davantage d'évitement de l'intimité bénéficiaient également plus de la lidocaïne topique. Il se pourrait que cette modalité thérapeutique concorde mieux avec la perception que les femmes avec la VP qui ont des niveaux élevés d'évitement de l'intimité ont d'elle-même, soit comme étant autonome et en mesure de gérer leurs symptômes (Brenk-Franz et al., 2015). Ce type de traitement pourrait d'ailleurs les amener à éprouver un sentiment d'autonomisation envers leur douleur, où elles ne dépendent plus de leur partenaire amoureux pour gérer la douleur lors des relations sexuelles et où elles prennent en charge la gestion de la douleur seules. Strauss and Brenk-Franz (2016) recommandent d'ailleurs l'ajustement de la posture du personnel médical dans l'approche aux

patients avec un style d'attachement plus évitant. En effet, ils conseillent d'intervenir minimalement et d'utiliser des médiums d'intervention technologique comme l'internet pour prévenir l'activation des mécanismes de retrait et d'évitement chez ces individus, ce qui pourrait nuire au lien thérapeutique et à l'adhérence au traitement. Dans le contexte de l'étude, les femmes assignées à la lidocaïne topique assuraient leur traitement de façon autonome, avec l'intervention minimale d'un(e) auxiliaire de recherche téléphonant chaque semaine pour s'assurer que les femmes ne présentaient pas de complication associée à leur traitement. Cette approche pourrait avoir convenu davantage aux femmes plus évitantes de l'intimité, où elles auraient pu vivre un sentiment d'auto-efficacité renforcé dans la gestion de leur douleur.

Les résultats de la thèse démontrent que l'anxiété d'abandon n'était pas un modérateur significatif de l'efficacité thérapeutique en comparant la TCCC à la lidocaïne topique pour le traitement de la VP. Il se pourrait que la modalité thérapeutique de thérapie de couple soit cohérente avec les motivations de consolidation du lien d'attachement que l'on peut retrouver chez les femmes avec la VP ayant davantage d'anxiété d'abandon (Birnbaum, 2010). En effet, la TCCC pour la VP inclut des interventions qui visent à accroitre l'intimité émotionnelle et physique dans la relation avec leur partenaire amoureux, ce qui pourrait interpeller les femmes avec la VP qui ont davantage d'anxiété d'abandon. Ceci pourrait faire en sorte qu'elles soient tout aussi engagées et motivées à prendre part à la thérapie que des femmes ayant un attachement plus sécurisé, et bénéficieraient pleinement de la TCCC. Ces résultats sont néanmoins en contradiction avec la littérature antérieure qui démontre que l'anxiété d'abandon est associée à un plus faible succès thérapeutique en psychothérapie (Levy et al., 2018). Cette discordance pourrait être attribuable à la modalité thérapeutique de couple qui concorde davantage avec le désir des individus ayant plus d'anxiété d'abandon de se rapprocher de leur partenaire amoureux.

D'ailleurs, une étude examinant les prédicteurs du succès thérapeutique de la thérapie de couple centrée sur les émotions (TCCÉ) démontre que l'anxiété d'abandon est associée à une plus grande amélioration de la satisfaction conjugale au cours de la thérapie (Dalgleish et al., 2015). Pris ensemble, ces résultats suggèrent que la thérapie de couple pour les dysfonctions sexuelles puisse être un format thérapeutique qui favorise le progrès thérapeutique chez les individus qui présentent davantage d'anxiété d'abandon, comparativement aux formats individuels ou de groupe. En ce sens, de plus en plus de chercheurs dans le domaine médical recommandent l'intégration de l'attachement dans la conceptualisation de la problématique et dans l'approche aux patients de façon à optimiser l'efficacité des interventions prodiguées (Hunter & Maunder, 2015; Jimenez, 2016; Strauss & Brenk-Franz, 2016).

Maltraitance à l'enfance comme modérateur de traitement. Les résultats du troisième article de la thèse démontrent également que la maltraitance cumulative à l'enfance agit comme modérateur de traitement en comparant la TCCC à l'application quotidienne de lidocaïne topique, où les individus ayant vécu davantage de maltraitance à l'enfance bénéficiaient moins de la TCCC que du traitement médical en ce qui a trait à l'amélioration de la satisfaction et de la fonction sexuelles.

Ces résultats concordent avec ceux des études antérieures examinant la maltraitance à l'enfance comme modérateur de traitement pour différentes difficultés psychologiques ou médicales, suggérant que les traitements médicaux seraient plus efficaces que la TCC pour les individus qui ont un historique de maltraitance à l'enfance. En effet, une étude démontre que la TCC serait moins efficace que la prise d'antidépresseurs chez les individus avec un historique de maltraitance à l'enfance qui souffrent de dépression majeure (Lewis et al., 2010). Une autre étude démontre même que pour les individus avec un historique de maltraitance à l'enfance, la

combinaison d'antidépresseurs avec la psychothérapie serait moins efficace que la prise d'antidépresseurs seule (Asarnow et al., 2009). Il se pourrait que les individus ayant subi de la maltraitance à l'enfance ne possèdent pas les ressources nécessaires pour bénéficier pleinement de la psychothérapie. C'est ce qu'avancent Briere (1996) avec le *Self-Trauma Model* et MacIntosh (2019) avec le *Developmental Couple Therapy for Complex Trauma* – deux modèles thérapeutiques axés sur le traitement des individus présentant des historiques de maltraitance. En effet, selon ces auteurs, les expériences de trauma à l'enfance mèneraient au développement de croyances et d'attentes distordues vis-à-vis les relations interpersonnelles, notamment en ce qui a trait à la confiance et à la sécurité dans le lien avec les autres, et au développement de stratégies d'évitement des émotions négatives qui se perpétuerait dans le temps. Ainsi, à l'âge adulte, les individus ayant subi de la maltraitance à l'enfance auraient des capacités du soi lacunaires, c'est-à-dire davantage de difficultés liées à la régulation émotionnelle, à l'identité sexuelle, au développement de l'intimité relationnelle, à la capacité de mentalisation et au développement d'un lien d'attachement à l'âge adulte. Ces difficultés mèneraient d'ailleurs à davantage de difficultés sexuelles et relationnelles à l'âge adulte (Bigras et al., 2017; Bigras et al., 2021; Dugal et al., 2016; Meston et al., 2006; Pulverman et al., 2018).

Les capacités du soi limitées chez les individus avec un historique de trauma, lorsque non-ciblées directement en contexte thérapeutique, pourraient être des entraves importantes au succès thérapeutique. En effet, une méta-analyse récente trouve que les psychothérapies centrées sur le trauma démontrent des effets supérieurs à celles qui ne ciblent pas spécifiquement les symptômes post-traumatiques (Ehring et al., 2014). Ceci pourrait également être vrai dans le contexte du traitement des difficultés sexuelles, où les individus avec un historique de maltraitance arboreraient des difficultés qui viendraient s'imbriquer dans leur problématique

sexuelle (MacIntosh, 2019; MacIntosh et al., 2020). En ce sens, MacIntosh (2019) soutient l'importance de soutenir le développement des capacités du soi avant de prioriser des difficultés relationnelles ou sexuelles en contexte de thérapie de couple.

À ce jour, seulement une étude dans le domaine du traitement des difficultés sexuelles a examiné l'impact de l'abus sexuel à l'enfance sur l'efficacité thérapeutique et trouve que les femmes avec un historique d'abus sexuel à l'enfance bénéficiaient davantage d'une thérapie psychoéducative de groupe basée sur la pleine conscience sur le plan de la détresse, de l'excitation, et de la fonction sexuelles que les femmes sans historique d'abus sexuel (Brotto et al., 2008). Toutefois, il est démontré que les interventions basées sur la pleine conscience sont efficaces pour traiter les symptômes de traumas, faisant en sorte que les résultats de cette étude, bien qu'en contradiction avec les nôtres, puissent ne pas s'appliquer à la TCCC telle que prodiguée dans le contexte de notre étude. De plus, cette thérapie n'était pas administrée en format de couple, ce qui pourrait faire en sorte que les femmes avec un historique d'abus étaient potentiellement moins émotionnellement suractivées par la présence et les interactions avec leur partenaire (MacIntosh, 2017). En effet, les individus avec un historique de maltraitance présentent des lacunes dans leurs habiletés de régulation émotionnelle, pouvant rendre la psychothérapie de couple plus laborieuse et confrontante pour ces individus (MacIntosh, 2019). En ce sens, une étude administrant de la TCCÉ non centrée sur l'abus auprès de dix couples chez lesquels la femme a un historique d'abus sexuel à l'enfance a démontré que seulement 50% des couples rapportaient des progrès en termes de satisfaction conjugale, avec trois couples ayant rompu avant la fin de l'étude (MacIntosh & Johnson, 2008). De plus, les chercheurs ont demandé l'évaluation qualitative du processus thérapeutique aux participants, où la majorité rapportaient des incidents de dysrégulation émotionnelle, de dissociation, de sentiment de danger et

d'hypervigilance en la présence de leur partenaire, de surcharge émotionnelle et de conflits entourant la sexualité, ce qui ultimement entravait le déroulement des séances de thérapie. Ces résultats illustrent comment la psychothérapie de couple peut s'avérer ardue pour les individus avec un historique de trauma et comment leurs capacités du soi déficitaires peuvent entraver le processus thérapeutique optimal. Les auteurs de cette étude concluent d'ailleurs qu'il est nécessaire de moduler et d'adapter la psychothérapie de couple aux individus ayant vécu des expériences de maltraitance de façon à éviter la suractivation émotionnelle, notamment à travers l'usage de protocoles de traitement plus longs et moins centrés sur la dimension affective.

Conséquemment, la TCCC développée dans notre laboratoire, bien que n'étant pas une thérapie centrée sur les émotions, elle pourrait ne pas être adaptée aux femmes avec un historique de maltraitance à l'enfance. En effet, cette TCCC vise à accroitre la proximité émotionnelle et physique et à promouvoir l'intimité au sein des couples, ce qui peut s'avérer un défi pour les femmes avec la VP avec un historique de maltraitance à l'enfance, qui ne possèdent pas nécessairement les capacités du soi nécessaires pour s'engager dans un tel travail thérapeutique. De plus, la courte durée de la thérapie – de surcroît manualisée et très structurée, car en contexte d'ECR – laisse peu de latitude pour l'adapter à un rythme plus confortable pour ces couples, où la confiance et l'apprivoisement de la sexualité prennent davantage de temps (MacIntosh, 2019). Ces éléments, pris ensemble, pourraient expliquer pourquoi les femmes avec un historique de maltraitance randomisées à la TCCC ont rencontré un plus faible succès thérapeutique comparativement à celles randomisées à la lidocaïne topique.

Contributions principales de la thèse

Contributions théoriques

La VP étant un problème de douleur chronique affectant la sexualité des couples, les résultats de la présente thèse permettent d'appuyer plusieurs modèles théoriques des domaines de la sexualité, des relations de couple et de la douleur chronique.

Dans un premier temps, la thèse apporte une contribution significative à la théorie de l'attachement, notamment en appuyant l'interdépendance des systèmes d'attachement, de sexualité et de *caregiving* chez les couples (Mikulincer & Goodman, 2006). La VP étant une menace à la relation par son impact sur la sexualité des couples, la thèse permet de démontrer la pertinence de la théorie de l'attachement pour comprendre les processus interpersonnels qui sous-tendent l'ajustement des couples à la VP. Elle vient soutenir l'idée que l'attachement affecte les représentations de soi et des autres, ce qui en retour comporte des implications pour l'adaptation des femmes et de leur partenaire à la VP. Elle corrobore également les théories qui soutiennent que les dimensions d'attachement sont associées à des stratégies d'hyperactivation ou de désactivation émotionnelle visant à restaurer un sentiment de sécurité interne, et démontre comment ces stratégies affectent l'ajustement des couples à la VP.

Dans le domaine de la sexualité, Muise et al. (2018) soulignent le manque d'études qui examinent les mécanismes explicatifs des associations entre l'attachement et l'ajustement sexuel des individus et des couples, notamment dû au très peu d'études longitudinales et dyadiques dans le domaine de la sexualité. La thèse permet de combler cette lacune dans la littérature scientifique en identifiant plusieurs processus psychologiques et interpersonnels, comme l'auto-efficacité et les réponses des partenaires, liant l'attachement à l'ajustement sexuel des couples à la VP.

Les résultats de la présente thèse viennent également appuyer le *Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme* (Rosen & Bergeron, 2019)

qui stipule que les facteurs interpersonnels proximaux et distaux viennent affecter l'ajustement des couples à la présence de la douleur par l'entremise de difficultés de régulation émotionnelle. En effet, la thèse démontre des associations entre des facteurs distaux, soit l'attachement et la maltraitance à l'enfance, et proximaux, l'auto-efficacité face à la douleur et les réponses des partenaires, et l'ajustement des couples à la VP. Sans que la régulation émotionnelle ait été mesurée comme telle dans la thèse, plusieurs variables observées se rattachent de près ou de loin à ce concept (Koechlin et al., 2018; MacIntosh, 2019; Mikulincer & Shaver, 2019) et viennent appuyer les liens stipulés par ce modèle. D'autre part, bien que le modèle repose sur des assises empiriques importantes, un nombre très limité d'études ont examiné les variables proximales et distales dans le contexte de traitement de la VP (Brotto et al., 2020; Rosen et al., 2021). La présente thèse vient contribuer à ce mince corpus qui permettra d'étendre les implications du modèle au contexte thérapeutique de la VP. Enfin, tel que supposé par ce modèle, les facteurs interpersonnels distaux agiraient comme prédicteurs des facteurs interpersonnels proximaux, mais le manque d'études portant sur les interactions entre ces deux niveaux et le peu d'études longitudinales dans le domaine de la VP et des dysfonctions sexuelles limitent l'étendue de ces postulats à un niveau hypothétique. La présente thèse vient répondre à cette lacune théorique en étant la première à démontrer des associations entre les facteurs interpersonnels proximaux et distaux. D'une part elle démontre des liens entre l'attachement et les réponses des partenaires, mais elle permet également de démontrer la direction de l'association entre l'attachement et l'auto-efficacité dans la gestion de la douleur, appuyant l'hypothèse selon laquelle les facteurs distaux prédiraient les facteurs proximaux. À la lumière des résultats de la thèse, certaines modifications pourraient être apportées au *Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme* afin qu'il soit davantage représentatif de l'expérience des

femmes avec la VP. En effet, certaines variables distales, comme l'attachement et les expériences de maltraitance, pourraient être perçues comme étant statiques dans le temps et incidemment comme des prédicteurs des autres variables proximales et distales du modèle. Ces variables distales, plutôt que d'être bidirectionnellement associées avec des variables proximales, seraient plutôt illustrées comme des prédicteurs de ces dernières, telles qu'illustrées dans la figure 2.

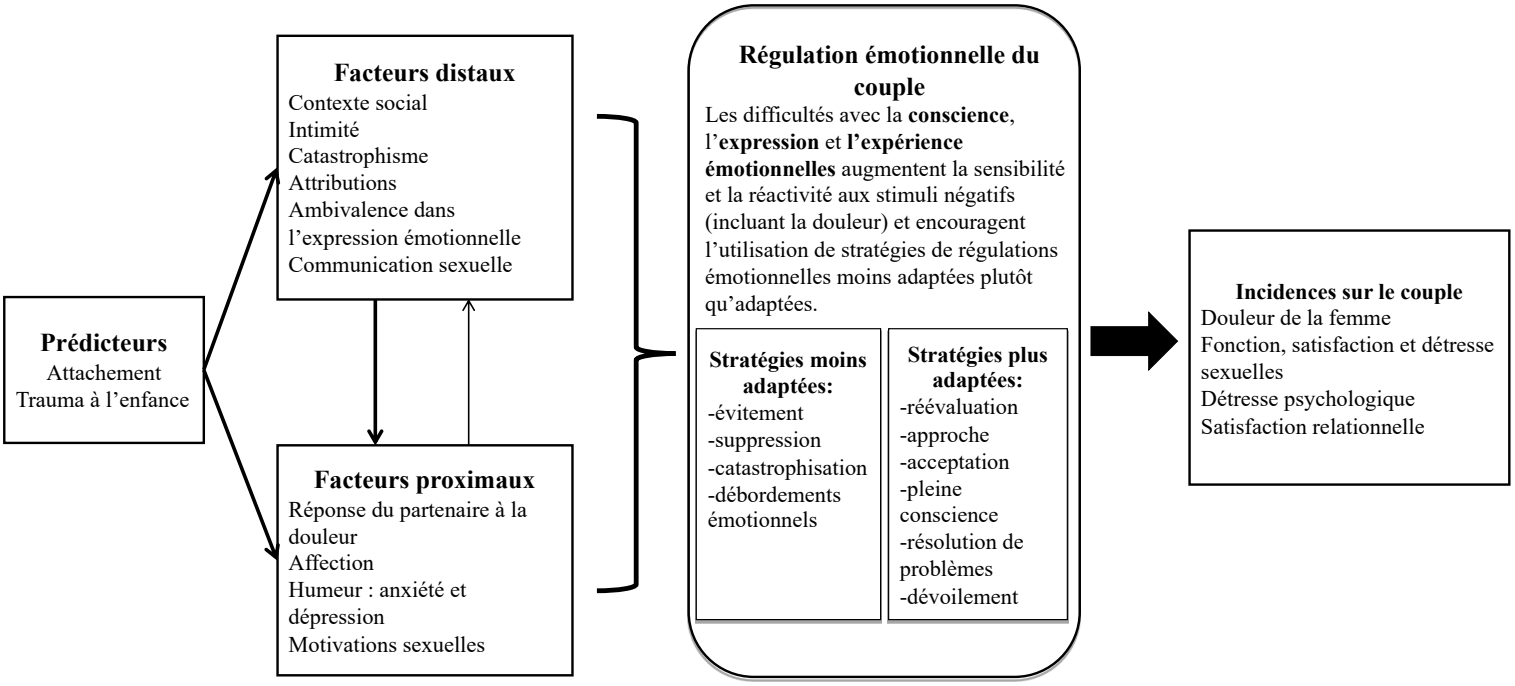


Figure 2. Modèle alternatif du *Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme*

En ce même sens, le *Modèle Attachement-Diathèse de la Douleur Chronique* (Meredith et al., 2008) stipule que l'attachement prédirait un nombre de processus plus ou moins adaptatifs qui mènerait à la chronicisation de la douleur et au maintien de la douleur chronique, mais aucune étude prospective à ce jour n'a pu déterminer la direction des associations entre

l'attachement et la douleur chronique, où certains auteurs stipulent que la présence de la douleur chronique pourrait alimenter l'insécurité d'attachement par l'entremise d'une perception de soi comme étant défectueuse ou dévaluée (Macdonald & Kingsbury, 2006). La thèse permet non seulement d'appuyer le *Modèle Attachement-Diathèse de la Douleur Chronique* en identifiant l'auto-efficacité comme mécanisme expliquant comment l'insécurité d'attachement peut contribuer au maintien de la douleur chronique, mais elle est également la première à démontrer la direction des associations entre l'attachement et l'intensité de la douleur. Romeo et al. (2017) étend d'ailleurs ce modèle aux relations interpersonnelles où ils proposent que l'adaptation des partenaires amoureux puisse également faire part des mécanismes explicatifs de l'association entre l'attachement et la douleur chronique. La thèse est l'une des premières à examiner l'attachement dans une perspective dyadique et permet d'appuyer les hypothèses de ces auteurs en démontrant des associations entre l'attachement des partenaires, leur réponse à la présence de la douleur et l'ajustement des couples à la VP. Toutefois, la thèse n'a pas trouvé d'association significative en ce qui a trait à l'influence longitudinale de l'attachement des partenaires amoureux, démontrant la complexité des mécanismes contribuant au maintien de la douleur chronique dans le temps.

Enfin, la thèse permet également de porter appui au modèle biopsychosocial de la douleur qui postule une interdépendance des facteurs biologiques, psychologiques et interpersonnels dans l'expérience de la douleur (Bergeron et al., 2015). Elle démontre les implications des facteurs interpersonnels distaux et dyadiques, soit l'attachement des deux membres du couple et les réponses des partenaires, mais aussi des processus psychologiques intra-individuels, soit l'attachement des femmes, les expériences de maltraitance et le sentiment d'efficacité personnelle dans la gestion de la douleur.

Contributions méthodologiques

La présente thèse comporte des forces méthodologiques qui contribuent significativement à l'avancée des connaissances dans les domaines de la douleur chronique, du couple et de la sexualité. Tout d'abord, l'utilisation d'un devis longitudinal sur deux ans dans le premier article constitue une avancée significative dans le domaine de la VP et plus globalement, des dysfonctions sexuelles. En effet, très peu d'études à ce jour ont utilisé des devis longitudinaux pour examiner l'évolution de la VP et des problèmes sexuels dans le temps. L'utilisation d'un devis longitudinal permet d'examiner les implications à long terme des variables examinées, mais également de déterminer la temporalité des construits à l'étude. En effet, l'utilisation de deux temps de mesure permet l'application de modèles statistiques autorégressifs croisés, qui servent à déterminer si une première variable permet d'en prédire une autre à un second temps de mesure, mais également si cette autre variable prédirait la première au second temps de mesure. Ainsi, l'utilisation de ce type de modèle permet de déterminer quelle variable prédit la suivante, mais également si des liens bidirectionnels existent entre les variables. Le premier article a permis de déterminer que l'attachement prédit l'auto-efficacité et la douleur, et que l'auto-efficacité prédit la douleur, plutôt que l'inverse. Ceci constitue une avancée significative, car aucune étude à ce jour n'a examiné l'attachement et l'intensité de la douleur de manière longitudinale.

Une autre contribution méthodologique importante repose sur l'utilisation de devis dyadiques dans les trois études de la thèse. En effet, les difficultés sexuelles survenant principalement dans le contexte de relations sexuelles partagées avec un(e) partenaire, il apparait primordial de prendre en considération l'impact de ces dernier(e)s dans le déroulement des activités sexuelles, les interactions de couple entourant les difficultés sexuelles et les

conséquences qu'elles occasionnent pour les deux membres du couple. De plus, l'utilisation de devis dyadique permet également de prendre en considération l'interdépendance des données entre les deux membres du couple. En effet, chacun des membres du couple influence l'autre, et cette interdépendance est prise en considération à travers l'utilisation du Modèle d'Interdépendance Acteur-Partenaire (Kenny et al., 2006). La prise en compte de cette interdépendance permet de raffiner notre compréhension des facteurs interpersonnels qui sous-tendent la VP et les dysfonctions sexuelles, où les résultats trouvés sont ajustés au contexte du couple. À ce jour, aucune étude n'avait examiné les associations entre l'attachement et les réponses des partenaires en incluant la perspective des deux membres du couple, ce qui permet une compréhension largement plus ajustée des interactions de couple entourant la VP. De plus, les devis dyadiques permettent de déterminer l'apport de chacun des membres du couple aux modèles examinés et permettent de contextualiser adéquatement les résultats trouvés. Dans le cas de la présente thèse, l'inclusion des partenaires amoureux dans le premier article permet de statuer que l'association longitudinale entre l'insécurité d'attachement chez les femmes avec la VP et l'intensité de la douleur est significative, et que cet effet se maintient même lorsque l'attachement des partenaires amoureux est pris en considération.

Enfin, la mise en place d'un ECR est une autre contribution méthodologique d'envergure, car elle permet la comparaison de l'efficacité des traitements offerts aux femmes avec la VP. Le manque d'ECR dans le domaine du traitement de la VP et des dysfonctions sexuelles chez la femme est une limite importante, car il empêche de déterminer quels traitements sont plus efficaces et réduit l'étendue et la fiabilité des recommandations que les professionnels peuvent émettre. L'inclusion des partenaires dans la TCCC pour le traitement de la VP est une contribution méthodologique importante considérant que les difficultés sexuelles sont

généralement influencées par les deux membres du couple (Hertlein et al., 2015; Rosen & Bergeron, 2019; Rosen, Rancourt, et al., 2014) et que très peu d'ECR pour le traitement des dysfonctions sexuelles à ce jour ont évalué une approche de couple (voir Trudel et al., 2001 pour une exception). Bien que les partenaires amoureux n'aient pas été inclus dans les analyses statistiques du troisième article de la thèse, ces derniers ont été impliqués dans l'étude en prenant part aux traitements, particulièrement dans la TCCC, faisant en sorte que les résultats s'inscrivent dans un contexte dyadique. L'inclusion des partenaires permet de prendre en considération l'impact des partenaires amoureux dans le traitement de la VP et d'agir sur les facteurs interpersonnels jusqu'à présent négligés dans les études de traitement pour la VP et pour les dysfonctions sexuelles. Enfin, l'examen de modérateurs de traitement au sein de cet ECR est une contribution novatrice au domaine de la VP et plus largement du traitement des dysfonctions sexuelles et des maladies chroniques, car elle permet non seulement de déterminer quel traitement est plus efficace, mais également pour qui. À ce jour, seulement une autre étude a examiné des modérateurs de traitement dans le traitement de dysfonctions sexuelles, ce qui souligne l'aspect innovant de cette méthodologie (Rosen et al., 2021).

Contributions cliniques

Sur le plan clinique, la thèse contribue significativement à l'amélioration de notre compréhension de la VP, de son évolution et de son traitement. Dans un premier temps, la thèse identifie un mécanisme qui contribue au maintien de la douleur dans le temps, soit l'auto-efficacité dans la gestion de la douleur. Cette variable a souvent été identifiée comme étant importante dans l'évolution de la douleur chronique (Jackson et al., 2014), et il n'en apparait pas différent en ce qui concerne la VP. Certaines interventions axées sur l'autogestion des symptômes chez les patients avec de la douleur chronique ont été démontrées comme améliorant

l'auto-efficacité dans la gestion de la douleur, ce qui en retour aurait des bienfaits sur l'intensité de la douleur, la qualité de vie et les symptômes dépressifs (Damush et al., 2016; Elbers et al., 2018; McGillion et al., 2008). Les résultats de la thèse permettent d'appuyer la pertinence de ces interventions en démontrant comment le faible sentiment d'auto-efficacité peut contribuer au maintien de la douleur chronique à long terme. Ils permettent également de cibler les femmes avec la VP plus susceptibles de voir leur douleur se chroniciser ou s'accroitre dans le temps, soit celles avec un niveau élevé d'anxiété d'abandon plus à risque d'avoir un faible sentiment d'auto-efficacité.

La thèse permet également d'identifier les impacts de l'attachement sur les interactions de couple entourant la VP et ses conséquences subséquentes sur l'adaptation des couples à la douleur, incluant la sphère sexuelle. Cette contribution est importante, car elle permet une meilleure compréhension des facteurs sous-jacents aux échanges problématiques chez les couples qui sont confrontés à la VP et à des difficultés sexuelles, en identifiant l'insécurité d'attachement comme étant associée aux réponses émises et perçues des partenaires. Elle permet non seulement d'identifier les couples plus à risque d'avoir des interactions difficiles autour de la douleur, mais permet également d'orienter certaines interventions cliniques qui peuvent améliorer significativement la communication des couples confrontés à la VP et à des problèmes sexuels comme une perte de désir. En effet, certaines interventions visant à nommer certaines insécurités qui peuvent sous-tendre les réponses délétères ou à améliorer la régulation émotionnelle et les habiletés communicationnelles pourraient être pertinentes pour les couples vivant avec la VP. En ce sens, la TCCÉ (Johnson, 2012) prend racine dans la théorie de l'attachement et voit les interactions problématiques et conflictuelles des couples comme la résultante d'un lien d'attachement non sécurisé dans lequel chacun exprime leur détresse

relationnelle de façon problématique. La TCCÉ a comme objectif d'aider les couples à comprendre et à exprimer les besoins d'attachement non répondus qui sous-tendent leurs interactions problématiques et d'encourager les couples à trouver de nouvelles façons d'interagir de façon à répondre aux besoins relationnels de chacun, afin de s'engager l'un envers l'autre dans la consolidation de nouveaux patrons d'interactions sécurisés (Johnson, 2012). Des études ont démontré que ce type de thérapie est efficace pour moduler les comportements des couples et pour améliorer le bien-être relationnel à long terme (Wiebe et al., 2016). Ce type de thérapie pourrait servir aux couples qui vivent davantage d'insécurité d'attachement et pour qui les interactions entourant la VP causent des méfaits sur leur bien-être sexuel et relationnel.

Enfin, l'identification de l'évitement de l'intimité et de la maltraitance à l'enfance comme modérateurs de l'efficacité thérapeutique a une portée significative pour le traitement de la VP et des dysfonctions sexuelles. En effet, ces résultats permettent d'identifier des profils cliniques sur lesquels les professionnels peuvent s'appuyer pour émettre des recommandations de traitement. Ceci permettra d'augmenter l'efficacité des traitements offerts à ces femmes et d'améliorer la qualité des soins qui leur sont prodigués. La prise en charge des femmes avec la VP est plus souvent qu'autrement faite de façon négligée et s'avère insatisfaisante pour ces dernières (Donaldson & Meana, 2011; Nguyen et al., 2013; Shallcross et al., 2018; Shallcross et al., 2019). Tel que souligné par Norcross and Wampold (2011), il est primordial d'identifier les modérateurs de l'efficacité thérapeutique afin de fournir des ressources adaptées au besoin des individus qui consultent. En ce sens, bien que la TCCC ait été démontrée comme étant aussi efficace, sinon plus, que la lidocaïne topique (Bergeron et al., 2021), les résultats de notre troisième article démontrent que celle-ci n'est peut-être pas adaptée aux individus qui présentent des difficultés d'attachement ou un historique de maltraitance à l'enfance. De plus en plus de

professionnels de la santé plaident l'importance d'adapter les traitements aux individus ayant subi des traumas (Mihelicova et al., 2018; Reeves, 2015) ou à ceux qui ont davantage d'insécurité d'attachement (Jimenez, 2016) comme ces variables influencent considérablement l'efficacité et l'alliance thérapeutiques. Considérant que l'efficacité des traitements pour la VP varie grandement d'une étude à une autre (Bergeron et al., 2020), l'identification des modérateurs de traitement permet une meilleure compréhension des facteurs pouvant influencer l'efficacité des traitements prodigués aux femmes avec la VP. Elle permettra également d'orienter les recommandations des professionnels œuvrant auprès de ces femmes et souligne l'importance de l'adaptation des traitements, notamment de la TCCC, au profil clinique des femmes avec la VP qui cherchent à consulter.

Limites de la thèse

Bien que la thèse contribue significativement à la littérature scientifique portant sur l'étiologie, l'évolution, le maintien et le traitement de la VP, elle doit être examinée à la lumière de ses limites. Tout d'abord, les trois études qui la constituent comprennent des biais d'échantillonnage qui limitent la généralisation des résultats. En effet, toutes les participantes avec la VP étaient des femmes en relation de couple, faisant en sorte que les résultats puissent ne pas être applicables aux femmes célibataires. La VP pourrait engendrer des difficultés différentes chez ces dernières, qui pourraient avoir une présentation clinique unique en termes d'intensité de la douleur et de détresse sexuelle et relationnelle (Azim et al., 2021). De plus, dans les articles deux et trois, les participantes devaient être actives sexuellement, ce qui pourrait faire en sorte qu'elles présentent des niveaux de douleur ou d'anxiété face à la sexualité moins importants que les femmes qui ont la VP qui sont inactives sexuellement.

Comme les deuxième et troisième études de la thèse étaient réalisées au sein d'une étude de traitement, certains biais d'échantillonnage supplémentaires se surajoutent à ceux-ci. En effet, les couples constituant les échantillons de ces deux études étaient activement à la recherche d'un traitement. Il serait possible de croire que ceux-ci vivent davantage de détresse sexuelle, relationnelle ou psychologique que les personnes ne recherchant pas de traitement. De plus, bien que nécessaires à la validité interne de l'étude de traitement, certains critères d'inclusion supplémentaires limitent la généralisation des résultats aux couples vivant avec la VP dans la population générale. En effet, les couples participants ne devaient pas avoir d'insatisfaction conjugale importante, de trouble de santé psychologique majeur ou rapporter de violence conjugale pour être éligibles à prendre part à l'étude, faisant en sorte que nous pourrions supposer que ces derniers présentent des habiletés de régulation émotionnelle, de santé psychologique ou de fonctionnement conjugal supérieures à ce à quoi l'on pourrait s'attendre chez l'ensemble des couples avec la VP.

Une limite supplémentaire concerne le recoupement important des participants entre les échantillons de l'article 2 et de l'article 3 de la thèse. En effet, ces deux études examinant certaines variables en commun, notamment les dimensions d'attachement, ainsi que la satisfaction et la détresse sexuelles, la confiance en la généralisabilité des résultats est compromise comme il est difficile de conclure si certains résultats obtenus s'appliquent uniquement au présent échantillon ou plus généralement à la population de femmes avec la VP.

Enfin, un dernier élément qui limite la généralisabilité des résultats concerne le fait que presque l'entièreté des participants était des Caucasiens canadiens dans des relations hétérosexuelles, faisant en sorte que les minorités culturelles, ethniques et sexuelles sont sous-représentées dans les études présentées. En effet, il serait possible de croire que les couples de

femmes s'adaptent différemment à la présence de la douleur que les couples hétérosexuels et aient une présentation clinique différente de ces derniers. De plus, la vision de la sexualité et des dysfonctions sexuelles étant largement influencée par la culture (Burri & Graziottin, 2015; Leiblum et al., 2009), il serait plausible que la vision de la VP et ses conséquences sur les femmes et les couples varient au sein d'échantillons plus variés culturellement, tel que démontré par une étude comparant les femmes hispaniques et non hispaniques (Nguyen et al., 2015).

L'utilisation de mesures autorapportées à travers les trois études constitue également une limite comme elles peuvent introduire un biais de rappel ou de désirabilité sociale.

Finalement, bien que le premier et le dernier article incluent des devis longitudinaux permettant de déterminer la direction des associations trouvées, le second article de la présente thèse utilise un devis transversal limitant les inférences causales des liens significatifs. En effet, la direction des associations pourrait être inversée; on pourrait émettre l'hypothèse selon laquelle les partenaires qui sont davantage insatisfaits sur le plan relationnel émettent plus de réponses hostiles, suscitant davantage d'insécurité au sein de leur relation amoureuse. De plus, l'utilisation d'un devis transversal cerne uniquement l'état de la relation actuelle, sans prendre en considération l'historique relationnel des couples, l'évolution de leur adaptation à la douleur et l'évolution de la douleur comme telle. Ceci représente un arsenal de variables confondantes qui ne sont pas mesurées au sein de cette étude. Par exemple, on pourrait supposer que les couples qui ont une facilité à adapter leur sexualité à la présence de la douleur, notamment par l'entremise de bonnes habiletés de régulation émotionnelle ou de communication dyadique, ont moins recours à l'expression de la colère et vivent une vie sexuelle plus satisfaisante.

Pistes de recherches futures

Les résultats de la présente thèse représentent une première étape dans l'étude de l'attachement en lien avec la VP, mais plusieurs pistes de recherche demeurent à explorer afin d'avoir un aperçu plus complet de ses implications. D'une part, il serait pertinent d'intégrer l'attachement comme variable d'intérêt dans le traitement de la VP. En effet, bien que l'attachement tende à rester relativement stable à travers le temps (Sutton, 2019; Waters et al., 2021), certaines interventions, comme la TCCÉ, permettent de mieux réguler les réponses comportementales liées à l'insécurité d'attachement chez les couples et promouvoir le bien-être relationnel des couples (Johnson et al., 2016). Plusieurs auteurs soutiennent d'ailleurs la pertinence de l'utilisation d'approches centrées sur l'attachement ou de la TCCÉ dans le traitement de la douleur chronique (Fitzgerald & Thomas, 2012; Jimenez, 2016; Kowal et al., 2003).

Une autre piste intéressante à explorer concernant les implications de l'attachement dans l'ajustement des couples à la VP concerne l'utilisation de devis d'études à journaux quotidiens, permettant d'examiner les interactions de couples de façon plus précise. Certaines études utilisant les journaux quotidiens ont examiné les interactions de couple en se basant sur le *Communal Coping Model* pour explorer comment le catastrophisme un jour donné prédit les réponses des partenaires à la douleur (Burns et al., 2015). Dans le cas de l'attachement, par exemple, il serait intéressant d'examiner si l'insécurité d'attachement permettrait de prédire la variabilité dans la détresse sexuelle et dans la satisfaction relationnelle et sexuelle les jours où il y a des activités sexuelles.

Finalement, une autre piste de recherche pertinente concerne l'identification d'autres modérateurs de l'efficacité thérapeutique dans le traitement de la VP. Les études portant sur le traitement de la VP démontrent des taux de réussite extrêmement variables (Bergeron et al.,

2020), illustrant le manque flagrant de connaissances des facteurs menant au succès thérapeutique. D'autres facteurs, comme l'auto-efficacité, la dépression, et la régulation émotionnelle devraient être examinés comme potentiels prédicteurs et modérateurs de l'efficacité thérapeutique pour la VP (Gilpin et al., 2017).

Conclusion

La thèse permet de mieux comprendre l'implication des facteurs proximaux, mais surtout distaux dans l'évolution, le maintien et le traitement de la douleur génito-pelvienne. Elle soutient la pertinence de l'attachement comme variable d'intérêt dans l'étude de la VP et de la sexualité appuie le *Modèle Interpersonnel de Régulation Émotionnelle de la Dysfonction Sexuelle de la Femme* en démontrant ses associations avec l'auto-efficacité, les réponses des partenaires à la douleur et le bien-être relationnel et sexuel des couples. De plus, l'identification de l'attachement et de la maltraitance à l'enfance comme variables modératrices de l'efficacité thérapeutique dans le traitement de la VP est une contribution importante permettant d'améliorer les soins offerts aux femmes qui souffrent de douleur génito-pelvienne. Enfin, la thèse soutient l'importance de l'utilisation de devis dyadiques dans l'étude de la VP, considérant la place qu'occupent les variables interpersonnelles dans l'expérience de la douleur génito-pelvienne.

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ANNEXE A – Tableau résumé des études portant sur l'attachement auprès d'échantillons cliniques avec des dysfonctions sexuelles

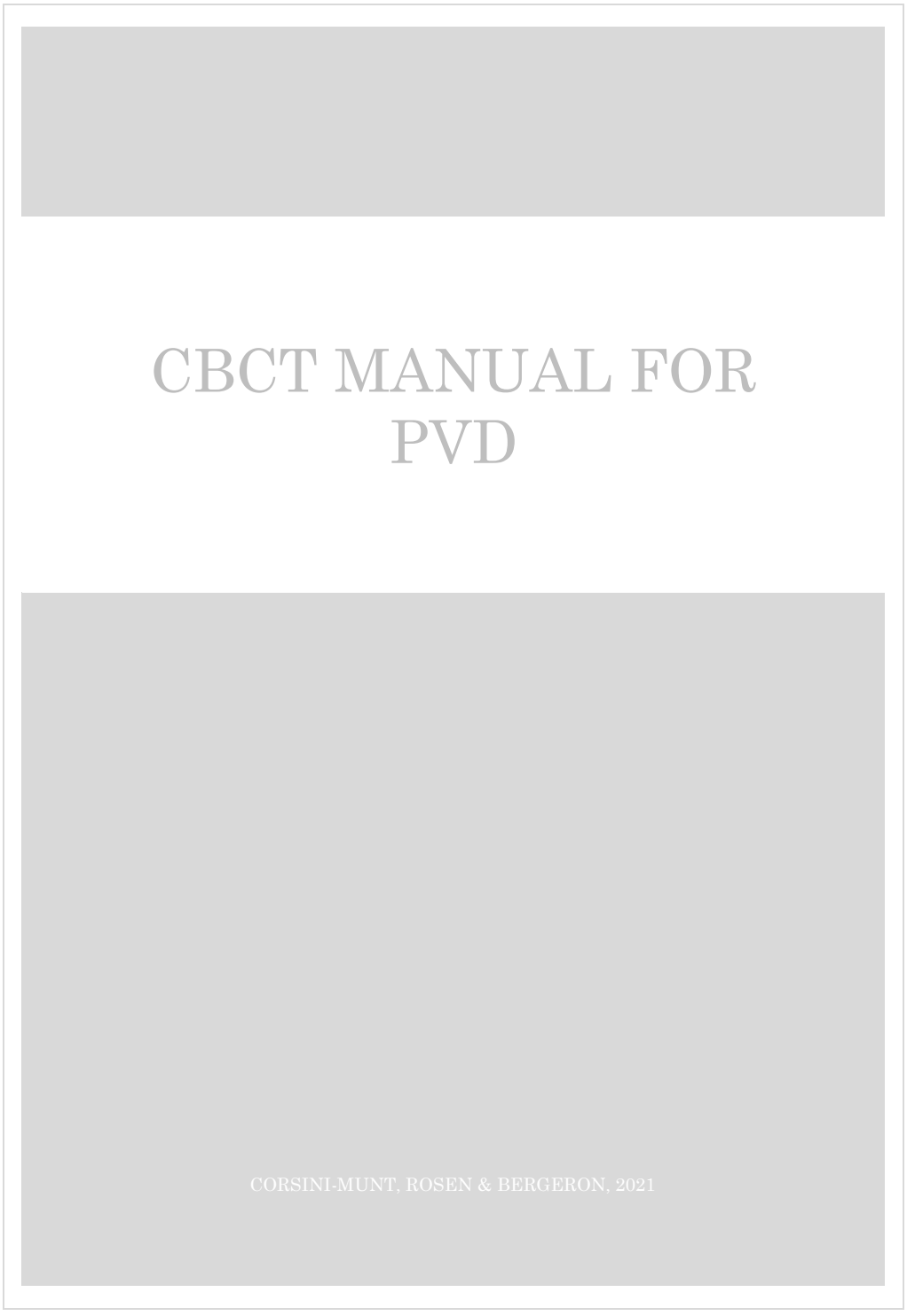
Auteurs	Échantillon	Devis	Mesure attachement	Variable dépendante	Résultats principaux	Limites
1. Bosisio et al. (2019)	50 couples dont la femme souffre de VP. ($M_{Âge}$ femmes avec douleur = 24,50 S_D = 4,03; $M_{Âge}$ partenaires = 26,10 S_D = 5.70)	Transversal	ECR	Réponses empathiques perçues et observées	Des symptômes dépressifs plus importants ainsi qu'un attachement anxieux chez la femme et le partenaire mènent à percevoir l'autre comme étant moins réceptif et sensible. Mesurée par un observateur entraîné, la réponse à l'autre était moins ajustée quand les symptômes dépressifs vécus étaient plus importants.	Devis transversal et corrélationnel. Couples majoritairement jeunes et hétérosexuels, généralisation possible seulement pour ce groupe. Discussion en laboratoire réduit la validité écologique.
2. Ciocca et al. (2015)	21 femmes et 23 hommes ayant une dysfonction sexuelle (anorgasmie, vaginisme, dyspareunie, vulvodynie, dysfonction érectile) ($M_{Âge}$ = 36,04 ± 6,07 ans), ainsi que 21 femmes et 20 hommes sans dysfonction sexuelle ($M_{Âge}$ groupe contrôle = 34,91 ± 9,6 ans).	Transversal	ASQ	Fonction sexuelle	Chez les femmes, celles qui présentaient une dysfonction sexuelle avaient plus d'inconfort avec l'intimité, voyaient plus les relations comme secondaires et avaient un plus grand besoin d'approbation. De plus, les scores au niveau de l'attachement sécure étaient significativement plus élevés chez le groupe contrôle.	Échantillon de petite taille. Grande variété de dysfonctions sexuelles pouvant partiellement expliquer la présence de différents types d'attachements insécures.

3. Granot, Yovell et al. (2018)	65 femmes, dont 21 qui ont vécu une agression sexuelle ($M_{Âge}$ = 34,43, S_D = 14,73) et 44 qui rapportent des douleurs lors des relations sexuelles ($M_{Âge}$ = 25.48, S_D = 3.27; 18 avec vécu de trauma non-sexuel et 26 sans expérience de trauma).	Transversal	ECR	Somatisation, style d'attachement	Les femmes ayant vécu un trauma sexuel présentaient plus d'anxiété, une plus grande somatisation et de plus hauts niveaux d'évitement dans leur style d'attachement que les femmes atteintes de dyspareunie. La somatisation et l'attachement des femmes ayant vécu un trauma non-sexuel et ceux des femmes n'ayant pas vécu de trauma n'étaient pas significativement différents.	Devis transversal. Les femmes ayant vécu un trauma sexuel ont été recrutées dans un centre de traitement, ce qui a pu influencer leurs réponses. Absence de mesure standardisée pour mesurer la fonction sexuelle dans l'étude. Échantillon de petite taille. Pas de données sur la dyspareunie dans le groupe des femmes ayant vécu un trauma sexuel. Données autorapportées.
4. Granot, Zisman-Ilani et al. (2010)	45 femmes rapportant la douleur lors des relations sexuelles (dyspareunie) ($M_{Âge}$ = 25,5 et S_D = 3,23) et 65 femmes sans douleur (groupe contrôle) ($M_{Âge}$ = 27,22 et S_D = 6,43).	Transversal	ECR	Douleur pendant les relations sexuelles	Le groupe dyspareunie rapportait davantage d'anxiété d'abandon et/ou d'évitement de l'intimité et un haut niveau plus élevé de somatisation. Des niveaux plus élevés de somatisation et d'évitement de l'intimité prédisent une plus grande probabilité de vivre de la dyspareunie.	Petit échantillon composé uniquement de jeunes femmes juives-israéliennes. Absence de diagnostic de dyspareunie par un professionnel de la santé. Mesure auto-rapportée de la somatisation, alors que généralement inconsciente.
5. Leclerc et al. (2015)	101 couples hétérosexuels actifs sexuellement, dont la femme avait un diagnostic de	Transversal	ECR-R	Douleur, fonction et satisfaction sexuelles,	L'attachement ne prédit pas l'intensité de la douleur. Un attachement plus évitant et/ou anxieux prédit une plus faible satisfaction sexuelle. Chez la	Étude corrélationnelle. Généralisation limitée (toutes les femmes avait la même dysfonction sexuelle, couples

	vestibulodynie provoquée ($M_{Âge}$ hommes = 37, $M_{Âge}$ femmes = 35).			affirmation sexuelle	femme, l'évitement de l'intimité est associé à une plus faible fonction sexuelle. L'affirmation sexuelle chez la femme est un médiateur de la relation entre l'attachement, la fonction et la satisfaction sexuelle.	hétérosexuels seulement). Mesures autorapportées.
6. Unlubilgin et al. (2021)	120 femmes entre 18 et 45 ans, mariées depuis au moins 6 mois, séparées en deux groupes : 60 femmes diagnostiquée avec un vaginisme primaire ($M_{Âge}$ = 26.2 ± 2.9 ans) et 60 femmes sans douleur gynécologique ($M_{Âge}$ = 27,4 ± 6,1 ans).	Transversal	RSQ	Trouble d'anxiété de séparation chez l'adulte, fonction sexuelle	Le groupe avec vaginisme présentait une plus grande fréquence de trouble d'anxiété de séparation et davantage d'attachement anxieux et évitant que dans le groupe contrôle. Les scores de total de fonction sexuelle, mais aussi les scores des sous-échelles de douleur, d'excitation et de satisfaction étaient plus élevés dans le groupe contrôle.	Données autorapportées, possible biais de rappel. Une partie du recrutement faite dans un hôpital qui est réputé pour le traitement du vaginisme.

Note. ECR: Experiences in Close Relationships Scale, ASQ: Attachment Style Questionnaire, ECR-R: Experiences in Close Relationships Scale – Revised, RSQ: Relationship Scale Questionnaire

ANNEXE B - Cognitive-Behavioural Couple Therapy (CBCT) Treatment Manual



Cognitive-Behavioral Couple Therapy (CBCT)

Treatment Manual for Provoked Vestibulodynia

Serena Corsini-Munt, M.A., Natalie O. Rosen, Ph.D., & Sophie Bergeron, Ph.D.

December 2013, Revised April 2021 ©

This manual was adapted from Bergeron and colleagues Cognitive-Behavioral Pain and Sex Therapy (CBPST) manual (Bergeron et al., 2001), a validated and widely used psychological treatment modality for women with provoked vestibulodynia (e.g., Bergeron et al., 2020; Bergeron et al., 2016). Relevant elements from Trudel and colleagues' empirically-tested group couples-based intervention for Hypoactive Sexual Desire Disorder (HSDD; Trudel et al., 2001; Trudel et al., 1996) were considered to aid with this manual's structure. Recent research regarding interpersonal factors relevant for couples struggling with provoked vestibulodynia (PVD) were utilized to develop intervention components. The past decade has seen an increase in research focusing on dyadic factors for couples experiencing pain during sexual activity, and the interventions included in this manual take these findings into account. Moreover, reflecting recent successful research and practice with pain patients and couples, elements from Acceptance and Commitment Therapy (ACT), a cognitive-behavioral approach, have also been incorporated into this manual. Pilot testing of this manual yielded promising results in terms of feasibility and symptom improvement for women with PVD and their partners (Corsini-Munt et al., 2014).

The results of a randomized clinical trial comparing this CBCT to overnight lidocaine ($N = 108$ couples) have been published. Full details can be found in:

Bergeron, S., Vaillancourt-Morel, M.-P., Corsini-Munt, S., Steben, M., Delisle, I., Mayrand, M.-H., & Rosen, N.O. (2021). Cognitive-behavioral couple therapy versus lidocaine for provoked vestibulodynia: A randomized clinical trial. *Journal of Consulting and Clinical Psychology, 89,* 316-326. https://doi.org/10.1037/ccp0000631

Rosen, N.O., Vaillancourt-Morel, MP., Corsini-Munt, S., Steben, M., Delisle, I., Baxter, ML., & Bergeron, S. (2021). Predictors and moderators of provoked vestibulodynia treatment outcome following a randomized trial comparing cognitive-behavioral couple therapy to overnight lidocaine. *Behavior Therapy*. https://doi.org/10.1016/j.beth.2021.05.002

Corsini-Munt, S. Bergeron, S., Rosen, N. O., Steben, M., Mayrand, M-H., Delisle, I., McDuff, P., Aerts, L. & Santerre-Baillargeon, M. (2014). A comparison of cognitive-behavioral couple therapy and lidocaine in the treatment of provoked vestibulodynia: Study protocol for a randomized clinical trial. *Trials, 15*(506). DOI: 10.1186/1745-6215-15-506.

Minor revisions to the manual were made in April 2021 to improve clarity and update the relevant research literature.

The authors of the CBCT Treatment Manual would like to express their extreme gratitude to Sheila MacNeil, PhD, for the insights she shared with us to help refine this treatment manual.

Table of Contents

Introduction

Cognitive-Behavioral Couple Therapy (CBCT), which targets pain and sex for the couple, is comprised of two major therapeutic approaches: cognitive-behavioral pain management, and sex therapy for couples. This targeted intervention is unique in its intention to include the partner in treatment for provoked vestibulodynia (PVD). This treatment should be considered and implemented only after diagnosis of PVD by a trained physician.

This treatment protocol involves 12 weekly sessions. The personnel required include a therapist with familiarity and expertise with Cognitive-Behavioral Therapy (CBT) for pain management and sexual difficulties specific to PVD. Each session will last approximately 75 minutes. CBT has been demonstrated to be an effective individual and group therapy for women with PVD (Bergeron et al., 2016; Bergeron, Binik, Khalifé et al., 2001; Brotto et al., 2020; Masheb et al., 2009), and there is preliminary evidence of couple-focused CBT as an effective treatment for couples with sexual dysfunctions (Corsini-Munt et al., 2014; Trudel et al., 2001; Hurlbert et al., 1993). The present treatment protocol is now empirically validated (Bergeron et al., 2021). Moreover, aspects of Acceptance and Commitment Therapy (ACT) have been built into this treatment manual. ACT as a treatment for chronic pain patients has demonstrated significant improvements in pain, and social and physical functioning (McCracken et al., 2005).

Therapists working with couples experiencing sexual impairment must be comfortable broaching and discussing sexuality and related issues, particularly relational contexts and pain experienced during intercourse. Moreover, therapists working with couples experiencing PVD should also be familiar with basic psychological pain management interventions (Landry et al., 2008). During the course of this treatment, therapists are welcome to contact one of the three authors of the manual should they have questions about its content and process of delivery.

Therapeutic process

Given that this manual has been tested as written (Bergeron et al., 2021; Corsini-Munt et al., 2014), it is important that the therapist adhere to the goals and 'session by session' instructions described below. Therapists are encouraged, however, to use clinical judgment and flexibility in adapting to each couple, such that they tailor the treatment to the couple's experience (e.g., spending more or less time on certain topics).

Each therapist will conduct themselves ethically and professionally, as indicated by their professional guidelines. Moreover, each therapist will respect the following guidelines:

1) Engender rapport and a collaborative working relationship with both members of the couple.
2) Use targeted interventions that support each member of the couple, and the couple as a unit (e.g., praise adherence and progress, and validate after each partner reveals or discloses something).
3) Clarify misconceptions and misunderstandings regarding pain, sex and the relationship by highlighting and discussing them.
4) Use the couple's experiences as examples or illustrations of various concepts introduced in treatment (e.g., how thoughts can influence pain perception).
5) Validate and challenge both partners' perspectives on the woman's pain experience (e.g., "It is completely normal to feel that way, many others report feeling that way…" and "What would be another way of thinking or interpreting the problem?").

Therapeutic frameworks

- CBT, as used for managing chronic pain, aims to modify behaviors, thoughts and emotions with the overall goal of improving the client's functioning. CBT serves to help lessen the impact pain can have in the person's life, and therefore can often result in reducing perceived pain (Thorn & Dixon, 2007).
- ACT shares many of the principles of CBT but extends them to help the client to use acceptance as a form of coping with their difficulties, to determine their values, and to act in concordance with these values. ACT involves providing support to the client to help achieve this goal. In terms of working with thoughts and emotions, the focus is on cognitive defusion and promoting cognitive flexibility rather than cognitive restructuring. Behaviourally, it emphasizes encouraging experiences and behaviours that contribute to valued living.

Working with couples

Working with couples can be challenging given the multiple relationships that the therapist must contend with during therapy. One must respect the relationship between the members of the couple, the relationship the therapist establishes with the couple, and with each member of the couple. Three preliminary principles have been proposed to help the therapist treating couples in distress (Meana, 2010):

1) The therapist should help the couple accept that there are things outside of their control and may not be changed during therapy. Finding points of accordance and promoting acceptance will help unite the couple.
2) The therapist should engender the notion that each partner take responsibility for their current distress. They share in the problem and its consequences.
3) The therapist can be an agent for positive change. By modeling validation, acceptance and empathy towards each member of the couple, the therapist can promote hope and help the couple develop the skills to change.

The overarching goal of couple sex therapy is to facilitate the development of a satisfying sexual relationship for both members of the couple. Moreover, this sexuality should be expressed and experienced in a climate of trust where each member can explore and develop their sexuality and intimacy with one another (Bergeron et al., 2020).

Challenges of working with couples experiencing sexual problems may include establishing the role of sexuality within the couple's intimate exchanges, that sexual difficulties can be accompanied by other dissatisfactions with the romantic relationship, and couples often have difficulty, even with one another, discussing their sexual lives, although they are often relieved when a health professional takes the initiative to do so (Bergeron et al., 2016).

Therapeutic objectives include motivating and validating both partners, which is not always easy when one member of the couple is identified as the one with the problem, or as the "patient". The partner without the sexual dysfunction, or sexual difficulty, may not understand their role in therapy, nor may they appreciate how therapy applies to them. An example of how to implicate and include the partner in therapy might be, "*Neither one of you are responsible for, or the cause of the PVD, which contributes to the pain experienced during intercourse, but you both play a role in the overall quality of your sexual relationship through the way that you relate to the pain and to each other in this context. For example, avoiding the problem can make it worse, but incorporating other types of non-painful sexual activities can heighten your intimacy, sexual desire and satisfaction. This is not to lay blame or guilt, but to acknowledge what can make the pain worse, what can decrease the distress associated with the pain and to highlight the capacity each of you have, to improve your intimate life together.*"

Assessment
An accurate assessment is crucial to knowing the presenting difficulties of the couple with whom the therapist is working. If the couple presents with significant relationship distress, intimate partner violence, or is attempting to resolve ambivalence about the status of their romantic bond, it can add another layer of complexity to the administration of the outlined interventions in this manual and may, at times, be a contra-indication (e.g., intimate partner violence). We have also found that the following factors may limit treatment success and require extra tailoring of the intervention to the specific clinical presentation: (1) high levels of childhood trauma, (2) insecure romantic attachment, and (3) high levels of anxiety (Charbonneau-Lefebvre et al., 2021). Knowing more about the couple's romantic context and interactions and having access to their "story" will help the therapist in approaching CBCT interventions. To help the therapist with this task, an assessment session has been built into this therapy.

In testing this manual, the following self-report measures were integrated into the therapist's assessment of each couple:

Childhood Trauma Questionnaire (CTQ-28; Bernstein et al., 2003)
Beck Depression Inventory (BDI-II; Beck et al., 1996)
Spielberger State-Trait Anxiety Inventory (STAI; Spielberger et al., 1970)
Couple Satisfaction Index (CSI; Funk & Rogge, 2007)
Select items from the Conflict Tactic Scale (CTS-2; Straus et al., 1996)
Female Sexual Function Index (FSFI, R. Rosen et al., 2000)
International Index of Erectile Function (IIEF; R. Rosen et al., 1997)

We encourage clinicians using this manual to use equivalent measures with which they are comfortable and competent.

If partners report distress in relation to sexual function, the therapist should be mindful of this when discussing sexual response cycles with the couple in Session 4. We recommend therapists use the knowledge and awareness of the information to tailor and navigate the CBCT interventions to each couple based on their history and current levels of distress. This may change the way certain interventions are presented, or the time spent on each intervention. Therapists interested in administering self-report measures for assessment and progress monitoring, might consult the list of measures recommended in N. Rosen, Bergeron, and Pukall (2020).

Using homework (or, in-between-session exercises)
An important aspect of a cognitive-behavioral approach is the assignment of homework. Homework in the therapeutic context allows the client to be engaged in the therapeutic work, to implement techniques or concepts learned during therapy, and to work in between and following the therapy sessions. The specific goals of the homework that are recommended to the clients are:

1) To become more aware of thoughts and emotions related to pain and sexual function for the couple, as well as the intimate relationship and how these aspects influence and are influenced by the pain problem. This goal may also include identifying physical/muscular aspects of the woman's pain and sexual function.
2) To allow clients to identify and examine typical psychosocial and biological responses to pain, as well as the responses of their intimate partners.
3) To increase awareness of biopsychosocial factors that can exacerbate or alleviate pain and sexual problems.
4) To identify less adaptive responses (both the woman's and her partner's) to painful intercourse, and to help the couple develop more emotional attunement during this frustrating experience.

5) To practice and consolidate adaptive coping strategies discussed during therapy sessions.
6) To record progress in pain management and sexual exploration.
7) To reinforce self-efficacy and empowerment on the part of the clients (both members of the couple) in achieving treatment goals.

The therapist will provide a rationale and explanation (oral and written to take home) for each homework exercise. With each exercise, the therapist will inquire if the clients have any questions and address any potential challenges or difficulties related to the homework. Checking in with homework each session highlights to clients its value. When reviewing homework, the therapist should emphasize the importance of continued effort, consider with the clients what may have contributed to a lack of success, and reinforce their efforts, as well as success.

Expected Treatment Outcomes

When working with couples experiencing PVD, it is important for the therapist to have realistic expectations regarding treatment outcomes, as well as to help establish realistic expectations for the couple. The therapist or therapist should work with couples while considering the following treatment outcomes:

- Treatment gains continue to occur even after treatment ceases.
- Sexual function may improve, but remain in the clinical range (i.e., may still be categorized as problematic) for some women.
- Pain may be eliminated completely in some couples and reduced by 30 to 50% in others.
- Treatment gains may be more pronounced in areas such as increased sexual satisfaction, reduced sexual distress, pain catastrophizing and pain anxiety, expansion of sexual repertoire, increased connection with core values relating to the couple's sexuality and relationship, improvement in communication and intimacy, and acceptance of pain (e.g., working towards the goal of finding and improving sexual intimacy rather than pain-free intercourse).
- There may be a rollercoaster of treatment gains and losses: Initial gains may result in joy and optimism, and enhanced expectations for continued improvements. Reminding the couple of realistic goals and that not all gains will be large, and that setbacks may occur is important in mitigating the potential for disappointment and discouragement.

Treatment Goals

The purpose of this manual is to provide clear guidelines for how to conduct CBCT with couples experiencing PVD.

Treatment goals are to:

1) Provide clear and accurate information about PVD, pain management, sexual function and dyadic factors.
2) Re-conceptualize PVD as a multidimensional pain disorder that is influenced by thoughts, emotions, behaviors, and the romantic relationship, among other factors (e.g., biomedical).
3) Approach PVD from a couples' perspective—shifting the perspective from the woman as the pain patient to the couple as a unit or system in which both members are affected by and affect the pain. Engaging the partner as an equal participant in the therapy is essential.
4) Reduce pain during intercourse and associated distress.
5) Understand, defuse and/or accept (as appropriate) the thoughts, feelings, behaviors and couple interactions associated with painful intercourse in order to increase adaptive coping strategies and decrease less adaptive coping mechanisms (e.g., woman and partner pain catastrophizing).
6) Improve the couple communication process regarding pain during intercourse and its consequences.
7) Facilitate the experience of pleasurable sexual experiences.
8) Strengthen relationship intimacy (e.g., disclosure, empathy, validation).
9) Consolidate couple and individual skills learned during therapy and maintain changes.

Session-by-Session Outline

Assessment
Introduction of the therapist to the couple Introduction of the couple to the therapist: Telling their story Setting a schedule

Treatment (Sessions 1-12)	
1	Assessment: Continuation Explanation of the treatment plan Goal setting: Opening the dialogue regarding treatment expectations Homework: *PVD readings* *Pain and sex journaling*
2	Review homework Psychoeducation: Information about PVD Psychoeducation: Dispelling myths about pain In-session exercise: ACT Value Clarification (Card Sorting) Discussion: Treatment expectations and goals Homework: *Mindfulness breathing* *Tantric breathing for two*
3	Review homework Discussion: Facilitating emotional disclosure and validating responses In-session exercise: Communication for both partners Homework: *Communication Tips and Turning Toward Your Partners' Needs* *Continuation of pain and sex journaling* *Continuation of breathing exercises*
4	Review homework Psychoeducation: Re-conceptualizing pain and PVD as multifactorial (Gate-control theory of pain) In-session exercise: Identifying biopsychosocial factors influencing pain specific to the couple Psychoeducation: Models of sexual response

	Discussion: Understanding how pain can impact upon sexuality and the relationship for both members of the couple **Homework:** *Pain localization and 'discomfort desensitization'* *Body-scan relaxation / meditation*
5	Review homework Discussion and psychoeducation: Role of anxiety/anticipation in pain and sex Discussion: Attitudes towards genitals for both partners **Homework:** *Kegel exercises*
6	Review of homework Discussion and psychoeducation: Role of the partner and partner responses to women's pain experience; impact of partner responses for both members of the couple Discussion: Continuing communication and facilitating the quality of the relationship (e.g., brief communication skills training) **Homework:** *Giving and receiving (Step 1 – Relaxing together and non-sexual massage)* *Disclosing favourite intimate moments (sexual intimacy)*
7	Review homework Psychoeducation and discussion: Sexual communication Discussion: Defining/redefining the sexual narrative in the context of pain, and "Outercourse" **Homework:** *Relaxation breathing with visualization and dilatation* *Involving the partner in dilation exercises*
8	Review homework Discussion: Problem solving – what's working and what's not working Psychoeducation and discussion: Facilitating sexual desire and arousal Psychoeducation: Introducing cognitive defusion **Homework:** *Facilitating sexual desire and arousal* *Continuation of giving and receiving (Step 2 – Relaxing together and massage)* *Continuation of pain and sex journaling*

9	Review homework Continued discussion: Sexual desire and arousal In-session exercise: Cognitive defusion—Defusing negative thoughts, beliefs and cognitive distortions related to **pain** (catastrophizing, hypervigilance, attributions, self-efficacy, etc.), the **relationship** and **sex.** Psychoeducation and discussion: Attributions about pain Follow-up: Pain and sex journaling check in—Any revelations to share? **Homework:** *Practice cognitive defusion*
10	Review homework In-session exercise and discussion: Cognitive defusion revisited **Homework:** *Continue practicing cognitive defusion and mindfulness* *Continuation of giving and receiving (Step 3 – Sexual touching and potential to focus on orgasm)*
11	Review homework Discussion: Asserting oneself with one's partner Psychoeducation and discussion: Avoidance of sexual activities **Homework:** *Homework exercises revisited*
12	Review homework Discussion: Progress and setbacks Discussion: Summarizing information learned Psychoeducation and discussion: Tools for the future

Assessment

- Introduction of the therapist to the couple
- Introduction of the couple to the therapist – Telling their story
- Setting a schedule

Pilot testing of this manual yielded several important insights, one of which emphasized the importance of taking the opportunity to assess the couple or get to know the couple before launching into CBCT. If either member of the couple has reported a history of childhood trauma, an awareness of this history will help the therapist navigate future discussions and hone their sensitivity to certain reactions from the couple during CBCT (Corsini-Munt et al., 2017).

Important considerations to make regarding the use of information presented in the assessment session are:

- Certain topics may get opened, but not resolved during this session. The therapist can suggest that some topics may be tabled until the woman, partner, or couple are ready to broach them in therapy.
- Issues raised in the assessment process (e.g., insecure attachment) may have an impact on expectations for the woman, for the partner, and for the couple. It is important to keep this in mind while navigating the treatment process.

If the therapists' setting allows for a separate assessment session or sessions, plan accordingly and use the following information to help guide your assessment.

In testing this manual, the assessment aspects were fit within Session 1 in which the therapist extended that first meeting to 90 minute and divided the time to use the first half to get to know the couple and their history and the second half to explain the structure of treatment and discuss goal setting with the couple.

Assessment: Introductions between the therapist and both members of the couple
The therapist will introduce themself to the couple and explain that they understand that one member has received a diagnosis of PVD. The therapist will explain the limits of confidentiality and remind the couple that they have the right to withdraw at any time, along with other general information relevant to informed consent process. The therapist will acknowledge that this experience (i.e., therapy) may be new and different, and that the couple is welcome to ask questions at any point. The therapist will encourage the couple to collaborate throughout the process. The therapist will emphasize that this therapy aims to ameliorate the pain and sexual function. The therapist will also mention that this session is an assessment session where the therapist will be trying to get to know the couple so that they can "personalize" the planned interventions as much as possible.

Assessment: Introduction of the couple to the therapist – Telling their story
The therapist will ask the couple to introduce themselves. Then, the therapist can ask the couple to share the story of their couple, and their current relationship dynamic. This is often a familiar and shared story for the couple. For example, the therapist can suggest the couple describe how they met, what first attracted them to one another, how they get along on a good day, a regular day, and during a conflict/crisis. In addition to helping the therapist determine the couple's current state of

the relationship, this will also be an important contribution to forming rapport with the couple given the the opportunity for the therapist to listen and reflect on their story.

The impact PVD has had on their relationship
The therapist can also encourage the couple to share information about the PVD **and** impacts to their relationship, while concurrently validating their disclosure. The therapist will also confirm and gather additional information about the couple's experience with the PVD pain as it occurs within their sexual relationship. Specifically, the duration of the pain, prior treatments that have been attempted, and the impact the pain has had for each partner (in brief). The therapist will facilitate disclosure or turn-taking from both partners by directing open-ended questions to each partner. Some couples may be more prepared to disclose and elaborate on their experiences, whereas others may be more reticent. In both cases, the therapist should indicate that they are taking a few minutes to confirm these important pieces of information. If more time is needed, the therapist can indicate that there will be more opportunities to discuss the impact the PVD has had on their sex life and their relationship in later sessions. If the couple is slow to open up, the therapist will remember that other opportunities will present themselves to confirm this information during the course of treatment.

The priority of this session is to assess the couple so that the therapist is equipped with information to help them tailor future interventions and understand each couple's specific needs and expectations. Please note that there is space in future sessions to continue the discussion of the impact PVD has had on their relationship.

Setting a schedule
The therapist will confirm the time and date of the next session with the couple. Ideally, the couple will keep the same time each week. Future sessions are designed to be approximately 75 minutes in duration.

Session 1

- Explanation of the treatment plan
- Goal setting: Opening the dialogue regarding treatment expectations

Homework:
PVD readings
Pain and sex journaling

Explanation of the treatment plan
The therapist will explain the transition from the assessment sessions (or assessment portion of this first meeting) to the explanation of the treatment plan. The therapist will share a copy of the treatment outline with the couple at this point, and state that this session (i.e., Session 1) is also about looking over the treatment plan, hearing more about their experiences with PVD (if there is more to discuss from the assessment sessions or portion of the session), and starting a discussion about the couple's expectations and goals for treatment.

The therapist will explain the treatment program by providing specific examples of how pain management functions (i.e., that thoughts, emotions, behaviors and the pelvic floor musculature play important roles in pain perception). The therapist will highlight the credibility of the interventions included in the treatment plan (e.g., "The information, treatment strategies and exercises all follow those that have been used effectively in practice and research.").

The therapist can validate previous experiences and dispel misconceptions couples may have heard from other health care professionals. "Many women and couples report having been to as many as four to six physicians in search of an explanation for their pain. Some have been told that the pain is all in their head, which is unfortunately a common misconception and is nonsense. It is not true, and it is not helpful. Your pain is real. The proper question is, what are the factors that influence the pain? At one time we used to think that pain was a simple matter: Something hurt your body and you felt pain. But it is just not that simple. Many different things affect the pain experience (e.g., surgery under hypnosis, athletes and dancers who do not feel pain until the end of a performance, people who walk on hot coals, etc.).

"Newer research has also shown that the partner can impact the woman's pain experience (both negatively and positively), and there are also consequences for the partner and the relationship. Throughout this treatment, we will examine all the things that may be related to your pain so that we can select the best set of strategies to be used to reduce your pain and can help you have a more satisfactory and pleasurable sex life. Some women and couples will improve by 50%, others by 75%; it will vary. Even if your pain doesn't go away completely, you'll be able to do more. To achieve these goals, it is important for you to understand that we do not have any magical techniques or procedures that will immediately take away your pain. Instead, we will work together to develop pain management tools. Some of these tools may include methods for controlling the pain, while others will help you integrate and accept the pain into your life, and still others will help you process your emotional reactions to the pain. You will be able to use all of the tools in your everyday life to better understand and eventually alleviate the pain."

The therapist will establish that both partners will be working together, and that both will be involved throughout the process. For example, "This therapy and the strategies we will be using are developed for the couple, and not just for the woman experiencing pain. Research suggests that including the partner for sexual difficulties is beneficial for the person experiencing the difficulty and for the couple."

The therapist will refer to the copy of the treatment outline and remind couples that they can look to the outline to understand what to expect in upcoming sessions. The therapist will ask the couple about their expectations of the treatment program (e.g., concerns, reservations, skepticism, doubts, hopes, etc.). The therapist should promote realistic goals (e.g., moving beyond unrealistic goals such as completely pain-free sex).

The therapist will answer any questions about the nature of the treatment outline, as well as clear up any misunderstandings.

Goal setting: Opening the dialogue regarding treatment expectations
The therapist will suggest that the couple take a few minutes during the week to discuss their respective expectations and goals for treatment, to be discussed in more depth during the next session. If the couple is prepared to discuss some of their expectations, and there is sufficient time, the therapist can open the dialogue with the couple with the understanding that the couple might still take some time to discuss their expectations with one another between sessions.

Homework

- PVD readings
- Pain and sex journaling

PVD readings
The therapist will provide each member of the couple with their own copies of the PVD articles to read during the next week. The therapist will explain that the information is meant to complement the information discussed during the session, and that they can discuss any questions during the next session.

Bergeron, S., Rosen, N. O., & Morin, M. (2011). Genital pain in women: Beyond interference with intercourse. *Pain,* 152, 1223-1225.

Shallcross, R., Dickson, J. M., Nunns, D., Taylor, K., & Kiemle, G. (2019). Women's experiences of vulvodynia: An interpretative phenomenological analysis of the journey toward diagnosis. *Archives of Sexual Behavior, 48*, 961-974. https://doi.org/10.1007/s10508-018-1246-z

Sheppard, C., Hallam-Jones, R., & Wylie, K. (2008). Why have you both come? Emotional, relationship, sexual and social issues raised by heterosexual couples seeking sexual therapy (in women referred to a sexual difficulties clinic with a history of vulval pain). *Sexual and Relationship Therapy, 23*(3), 217-226.

Please note that relevant readings should be updated based on the best available evidence. We retain the Bergeron et al., 2011 paper because it is brief and easily digestible. Couples also tend to appreciate a qualitative paper that describes other women and couples sharing similar experiences that they can relate to. Therapists are welcome to reach out the authors of this manual for recommended readings.

Pain and sex journaling – an activity for both partners

The therapist will provide each member of the couple with a few blank copies of the Pain and Sex Journaling handout. They will explain the rationale for the journaling exercise: to better understand the pain and what factors both partners perceive as influencing the pain, as well as how their shared sexual experiences are also contributing to the pain experience, and their feelings about sex as well. Self-monitoring of the pain will allow each member of the couple to recognize if the perceived pain intensity follows any relational, cognitive, emotional, and behavioural patterns. Reflection about their sexual activities can also help them be more mindful of what is happening for them in these intimate moments. They may each have causal theories about the pain, but the therapist will explain that journaling will make the phenomenon of the pain clearer and concrete and will help when implementing future therapeutic strategies. **The therapist will ask the couples to complete these journals following each experience of pain, and/or after each sexual experience.** The therapist will explain that the woman with PVD will likely have more entries than her partner given that the woman with PVD will be more aware of her own pain, and that the partner may only complete a journal if they are made aware of or witness the pain. The couple should not "create" a pain experience for the sole purpose of completing a journal entry. The therapist will collaborate with the couple to determine how best to remember journal completion (e.g., strategic placing on the nightstand, kitchen counter, cellphone or smartphone alarms, etc.). The therapist will explain how to complete the journal and will answer any questions the couple has.

SESSION 1 HANDOUT #1

Pain and sex journaling for the woman with PVD

The pain and sex journal constitutes a tool that will help you better understand your pain and the factors that influence it, as well as how you and your partner feel about your sexual activity. The journal will also help you measure your progress in the weeks to come. We will use the pain and sex journal regularly in our discussions. Fill in a journal form **immediately** following each event having caused you pain, or soon after a sexual experience.

1. Day: _____
2. Time: _____
3. Time of menstrual cycle: _____
4. Pain intensity (0 to 10): _____
5. Cause of the pain:_____
6. Duration of the pain: _____

If the pain was experienced outside of sexual activity (e.g., tampon insertion, bicycle riding):

7. Describe your thoughts, feelings, and behaviours before, during, and after the pain experience:

	Before	During	After
Thoughts			
Feelings			
Behaviours			

If the pain was experienced during sexual activity:
Describe your thoughts, feelings, and behaviours before, during, and after the sexual experience:

	Before	During	After
Thoughts			
Feelings			
Behaviours			

8. *How satisfying was your sexual experience (0-10)?* _____
9. *How much time did you spend on sexual activities other than or before trying penetration?* _____
10. *How aroused were you (0 to 10)?* _____
11. *How much sexual desire did you feel? (0 to 10)?* _____
12. *How relaxed did you feel (0 to 10)?* _____
13. *What did you or your partner do to try to reduce the pain?* _____
14. *How effective was this? (Circle the appropriate number).*

0 = did not help at all 1 = helped very little 2 = helped somewhat

3 = helped a lot 4 = stopped the pain

SESSION 1 HANDOUT #2

Pain and sex journaling for the partner

The pain and sex journal constitutes a tool that will help you better understand your perception and experience of your partner's pain and the factors that influence it, as well as how you think and feel about the pain and how you and your partner feel about your sexual activity. The journal will also help you assess changes in her pain and your perception of her pain. We will use the pain and sex journal regularly in our discussions. Fill in a journal form **immediately** following each event that caused your partner pain, or shortly after a sexual experience with your partner.

1. Day: _____
2. Time: _____
3. Perceived Pain intensity (0 to 10): _____
4. Cause of the pain: _____
5. Duration of the pain:_____

6. Describe your thoughts, feelings, and behaviours before, during, and after her pain experience:

	Before	During	After
Thoughts			
Feelings			
Behaviours			

If the pain was experienced during sexual activity:
Describe your thoughts, feelings, and behaviours before, during, and after the sexual experience:

	Before	During	After
Thoughts			
Feelings			
Behaviours			

7. How satisfying was your sexual experience (0-10)?_____
*8. How much time did you spend on sexual activities other than or before trying penetration?*_____
*9. How relaxed did you feel (0-10)?*_____
10. *What did you or your partner do to try to reduce the pain?* _____
11. How effective was this? (Circle the appropriate number).

0 = did not help at all 1 = helped very little 2 = helped somewhat

3 = helped a lot 4 = stopped the pain

SEMAINE 1 EXERCICE #1
Journal de douleur et relations sexuelles (pour elle)

Le Journal de douleur et des relations sexuelles est un outil qui vous aidera à mieux comprendre votre douleur et les facteurs qui l'influencent ainsi que vos sentiments et ceux de votre partenaire par rapport aux relations sexuelles. Le journal vous aidera aussi à mesurer votre progrès dans les semaines à venir. Nous utiliserons le Journal de douleur et relations sexuelles régulièrement dans nos discussions. Remplissez un Journal de douleur et relations sexuelles **immédiatement** après chaque événement vous causant de la douleur ou après une expérience sexuelle.

1. Jour : _____ 2. Heure : _____
3. Jour du cycle menstruel : _____ 4. Intensité de la douleur (0 à 10) : _____
5. Cause de la douleur : _____ 6. Durée de la douleur : _____
7. Où étiez-vous? _____

8. Décrivez vos pensées, émotions et comportements avant, pendant et après une expérience de douleur:

	Avant	Pendant	Après
Pensées			
Émotions			
Comportements*			

Décrivez vos pensées, émotions et comportements avant, pendant et après une expérience sexuelle :

	Avant	Pendant	Après
Pensées			
Émotions			
Comportements*			

À quel niveau étiez-vous satisfaite de votre expérience sexuelle?
Pas du tout - - Moyennement - - Complètement

***** *Si la douleur est survenue lors d'une expérience sexuelle*
9. *Combien de temps avez-vous consacré aux préliminaires?* _____
10. *Quel était votre niveau d'excitation (0-10)?* _____
11. *Jusqu'à quel point étiez-vous lubrifiée (0-10)?* _____
12. *Jusqu'à quel point aviez-vous le goût de faire l'amour (0-10)?* _____

13. *Comment votre conjoint(e) a-t-il/elle réagi à la douleur?*

_____

_____

14. Jusqu'à quel point étiez-vous détendue (0-10)? _____

Qu'est-ce que vous ou votre conjoint(e) avez fait pour essayer de diminuer la douleur?

_____

15. Quelle en était l'efficacité? (Encerclez la réponse appropriée)

0 = pas du tout aidé 1 = très peu aidé 2 = quelque peu aidé

3 = a beaucoup aidé 4 = a arrêté la douleur

SEMAINE 1 EXERCICE #2

Journal de douleur et relations sexuelles (pour le/la partenaire)

Le Journal de douleur et relations sexuelles est un outil qui vous aidera à mieux comprendre votre perception et l'expérience de la douleur de votre partenaire et les facteurs qui l'influencent ainsi que vos sentiments et ceux de votre partenaire par rapport aux relations sexuelles. Le journal vous aidera aussi à mesurer les changements dans les semaines à venir. Nous utiliserons le Journal de douleur et relations sexuelles régulièrement dans nos discussions. Remplissez un Journal de douleur et relations sexuelles **immédiatement** après chaque événement causant de la douleur à votre partenaire ou après une expérience sexuelle.

1. Jour : _____ 2. Heure : _____
3. Intensité de la douleur selon vous (0 à 10) : ____ 4. Cause de la douleur selon vous : _____
5. Durée de la douleur : _____ 6. Où étiez-vous? _____

7. Décrivez vos pensées, émotions et comportements avant, pendant et après une expérience de douleur:

	Avant	Pendant	Après
Pensées			
Émotions			
Comportements*			

Décrivez vos pensées, émotions et comportements avant, pendant et après une expérience sexuelle :

	Avant	Pendant	Après
Pensées			
Émotions			
Comportements*			

À quel niveau étiez-vous satisfait(e) de votre expérience sexuelle?
Pas du tout - - Moyennement - - Complètement

***** *Si la douleur est survenue lors d'une expérience sexuelle*
8. *Combien de temps avez-vous consacré aux préliminaires?* _____
9. *Comment avez-vous réagi à la douleur?* _____
_____
10. *Comment votre conjointe a-t-elle réagi à la douleur?* _____

Session 2

- Review homework
- Psychoeducation: Information about PVD
- Psychoeducation: Dispelling myths about pain
- In-session exercise: ACT value clarification exercise: Card sorting
- Discussion: Treatment expectations and goals

Homework:
Mindfulness breathing
Tantric breathing for two

Review homework
The therapist should check with the couple that they understand Pain and Sex Journaling and answer any questions. The therapist should address lingering or new questions regarding PVD. If clients have not been able to do their homework, the therapist should adhere to the guidelines listed above, take a few minutes to identify obstacles to homework completion, and identify factors that could dissolve these barriers.

When answering questions, the couple may have about the articles provided to them in the previous session, the therapist should attempt to integrate the below information about "PVD" and "Dispelling myths about pain".

Information about PVD

Rationale for provision of information about PVD
(Research information for the therapist)

Many women are often not aware that their pain is even a disorder. As difficult as it is for women to conceptualize their pain as a disorder or a diagnosable pain problem, it may be equally or more difficult for the partner (who does not experience the pain first-hand) to understand PVD. Debunking myths and providing accurate information about PVD will help foster an understanding of the pain and help normalize what these couples are experiencing. The provision of statistics can often be reassuring, so that they know they are not alone, and that others experience this problem.

The therapeutic power of providing accurate information to women with PVD was demonstrated in a study of women with PVD who participated in three 1-hour educational seminars. The results indicated significant improvements in depression and anxiety, as well as sexual functioning, and reductions in sexual distress. The decrease in psychological symptoms associated with the provision of accurate information about PVD may serve to reduce catastrophizing about the pain and set the stage for subsequent pain management options, such as psychological therapy (Brotto et al., 2010).

Information to provide:

- Definition (symptoms and diagnostic criteria) of PVD and dyspareunia
  - Provoked vestibulodynia (PVD) is characterized by pain experienced at the entrance of the vaginal opening, at the vulvar vestibule. Think the entrance of the vulva leading to the vaginal canal. The word provoked is in there to indicate that pain can be experienced when the area is touched or penetration is attempted.
  - For many women with PVD this occurs when they attempt to sexual activity that includes vaginal penetration (e.g., penis in vagina intercourse, use of a inserted sex toy).
  - Pain can also happen with other activities (e.g., cotton-swab test conducted by physician for diagnosis, tampon insertion and removal, pants that are too tight, sitting too long, riding a bicycle, etc.)
  - Pain that happens during sex is what we call dyspareunia.
- Statistics and rates:
  - Onset typically experienced among women between 18 and 30 years of age
  - Prevalence rates of pain during sex are up to 15-20%; PVD specifically is 8%
- Etiology and course:
  - Can begin from first intercourse, or later on, following repeated yeast infections, or other trauma to the area, and for no apparent reason
  - Likely multifactorial in nature (yeast infections, past trauma, hormonal - early and prolonged use of contraceptives, neuropathic - changes in nerve pathways like in other chronic pain conditions and increased sensitivity to pain, increased pelvic floor muscle tension)
  - History of consulting many doctors - many women think they are not normal, are ashamed and have a hard time talking about it with many people
- Adverse impacts and consequences to sexual functioning (diminished desire, arousal and frequency of orgasm and sexual activity), and consequences to the relationship
- Recent epidemiological research (the study of patterns, course, causes, and effects of health problems, or diseases) has shown that women with PVD are more likely to score higher on anxiety and depression symptoms, as well as women with anxiety and depression disorders are more likely to report PVD (Khandker et al., 2011). On a daily level, anxiety makes the pain and both partners' sexuality worse.
- Childhood maltreatment experiences (e.g., abuse, neglect) are risk factors for the development of PVD and are also associated with worse PVD symptoms in adulthood (relative to women with PVD who do not report childhood maltreatment experiences).

The therapist will ask the couple if any of the information rings true to them, ask about their reactions to this information, and normalize their thoughts and feelings.

Dispelling myths about pain

Understanding the mechanisms of pain will help clarify the experience of PVD for the woman and her partner. As part of this component of treatment, the therapist will briefly explain and discuss how chronic pain is believed to occur and help clarify and repudiate any myths concerning pain. A more in-depth discussion of how pain works is planned for Session 3.

"Pain is multifactorial and can be something we do not consider too deeply. For example, pain is often thought of our body's way of telling us something is harmful and is usually felt acutely. Unfortunately for some people, pain can become chronic and start to interfere with functioning, and then it can become problematic. There are various ideas or myths about pain that patients and their significant others often have. I am not sure if you believe these,

but they are worth our going over and considering where they fit and do not fit with your own beliefs."

***MYTHS*:** If physicians cannot cure your pain or find out exactly what is causing it, then your pain must be in your imagination (Malec et al., 1977). **FALSE**. If you can make your pain less by psychological self-control, then the pain was "all in your head" to begin with (Malec et al., 1977). **FALSE.**

The therapist can say something along the lines of the following: “Besides, looking at it another way, all pain is "in your head." After all, your brain is in your head. The brain is what tells you if you hurt, how much you hurt, where you hurt, and what to do about it. Even when you hurt because you hit your thumb with a hammer, the pain is "in your head." But it is real. This is why psychological methods of pain management work, because they involve your brain, which is where pain is perceived. You can learn to keep pain from bothering you as much. This is different than the notion of completely blocking pain signals from traveling to your brain. In short, the pain is real, but we can learn ways to help it not take up so much space in your life, and to minimize its negative consequences.”

The therapist can also add something like this: “Although some of the outward signs of pain may be visible, pain is a private, individual experience. And because it is so private, so individual, no two people undergo exactly the same feelings of pain from the same source. Many things besides the *intensity of the stimulation* contribute to the experience of pain. On two different occasions, you may experience quite different pain from exactly the same external stimulation (e.g., differences in pain ratings from the same stimulation, vaginal penetration and thrusting). For example, you may stub your toe on one day, and keep on walking, whereas another time, all forces being equal but perhaps you are more tired, or distracted with work, and the pain can feel much more intense and stop you in your tracks.”

The therapist will have the couple generate examples of their own to support the contention that pain is more than a consequence of the specific so-called physical cause. The therapist, via discussion, will begin to get the couple thinking about how different factors affect the pain experience and highlight the variations in their current pain. **At this point the intention is more to raise issues than to find solutions – this discussion will continue in Session 4 when discussing the Gate-Control Theory of pain.** The therapist’s probes are designed to begin the reconceptualization process in which the woman (and her partner) plays an active role in contributing to her presenting problems and is not a helpless bystander or victim of the pain. As this reconceptualization emerges, one implication is that something can be done to change the behaviors, feelings, and thoughts that affect the pain experience.

For example, “Can you think of any examples of when your pain varied and what might have contributed to this?” Additional prompts if they can’t think of anything: "Have you ever noticed that the pain varies depending on how aroused you feel, how lubricated you are, how you and partner feel about one another just before initiating sexual activity, how anxious you are, etc.”

ACT value clarification exercise: Card sorting
Please ensure you have a minimum of 30 minutes to adequately complete this exercise in-session. The therapist will introduce the Value clarification exercise by explaining the goal of the exercise:

The aim is to help the couple to raise their awareness and identify what is important in their lives, particularly with respect to their sexual and relational functioning, with the intention of acting and living in concordance with these values. Part of this process is also establishing a hierarchy of these values.

The therapist will begin by asking the couple some open-ended questions: Why is it important for them to connect sexually? How does it fit with their values? The couple will begin to examine their values, which may include values relating to sex and the relationship, as well as goals and reasons for having or wanting sex. Specifically, their sexual goals may include:

- being intimate with my partner
- having an orgasm
- pain-free sex
- feeling emotionally close to my partner
- avoiding conflict with my partner
- pleasuring my partner
- experiencing pleasure myself
- expressing love for my partner
- wanting to feel desirable
- avoiding problems in the relationship
- sharing a pleasurable experience with my partner
- avoiding being hurt by my partner
- preventing my partner from leaving me
- avoiding feeling guilty or saying no to my partner
- relieving stress
- and many others…

The goal of this exercise is to shift toward the idea that intimacy with one's partner is an important aspect of sex, and possibly more important than penetration/intercourse or pain-free sex.

Another aim of this exercise is to shift toward "approach" and "acceptance" themed goals as opposed to "avoidance" type goals. For example, the goal of having sex "To be close to my partner" relates to approaching positive outcomes in the relationship and is consistent with the value of having a strong, intimate relationship with one's partner. Whereas "To avoid a conflict" is an example of a sexual goal that relates to avoiding a negative relationship outcome, and may not allow the person to be acting in accordance with the values they hold for sex and their relationship.

Card sorting task – How to do it:
Have each member of the couple write a reason or goal for having or not having sex on a separate index card. Remind them that goals can include reasons for having sex, and other goals can relate to pain reduction or finding sexual activities that do not induce as much pain (e.g., these may relate to their reasons for seeking treatment). By the end, they should have two small stacks of cards: one for reasons to have sex and one listing reasons that they do not have sex. The therapist will ask them to share the reasons with one another. The therapist will then ask them to put ALL of the cards (i.e., from both stacks) in order of importance with the most important reason (i.e., the value that they hold most dear) at the top of the stack. If the value at the top is avoidance-oriented (e.g., avoiding conflict) or pain-focused (e.g., pain-free intercourse), ask them what it would be like to move a different value to the top (e.g., being intimate with partner/expressing love for partner). The therapist will explore with the couple how it feels to make that value more important. "What would it take to bring this value to the top of the pile?" Consistent with ACT's intention of helping the

clients live according to their core values, the therapist can also ask the following questions: "How does this value fit in with your core values? How would it feel to act in concordance with this value? How would your attitudes or behaviors have to change? What would be difficult about this behavior change? What would be the benefits?"

Note for the therapist: Some women with PVD find this task difficult as they tend to contrast their reasons for having sex as being informed by their pain with their partners' reasons, which can be free of mentions of pain. The therapist will validate these feelings and help remind couples that this activity is not about their respective reasons for having/not having sex lining up with one another. It is normal that they each have different reasons.

Some couples have asked to keep their stacks of cards or to revisit them in later sessions to see which reasons have become more important. If the therapist finds these spontaneous requests from clients therapeutic, they are encouraged to integrate these further uses of the card sort task.

Discussion: Treatment expectations and goals
From the card-sorting task, the therapist will have a better idea of the couple's goals and intentions for treatment. The therapist will assist the couple in identifying treatment goals for both partners and for them as a couple. "Knowing a bit more about PVD, having made the decision to take part in treatment together, what are some of your expectations and goals for treatment?"

During the discussion, the therapist will revisit the importance of establishing realistic expectations and goals. "In starting to view PVD as a chronic pain problem, we have begun to appreciate that there will be times where you may experience less pain and others where it seems greater. What we can do with treatment is develop ways to manage the pain so that it does not hurt your relationship or capacity to be sexually intimate with one another."

Homework:

- Mindfulness breathing
- Tantric breathing for two

Mindfulness breathing
Nearing the end of the session, the therapist will introduce the *breathing exercise*, starting with its **rationale**: "As you may have noticed, the anticipation of pain creates fear and anxiety, which has two consequences: (a) it inhibits arousal, which in turn inhibits lubrication, which increases the pain upon penetration; (b) it often contributes to an involuntary contraction of the vaginal muscles, which again, makes penetration a lot more painful, and sometimes impossible. For these reasons, an important part of the treatment is to learn to reduce anxiety." One major way in which they will learn to do this is via breathing/relaxation techniques.

This exercise is twofold, in that it aims to bring about a relaxation response and to serve as a mindfulness exercise. The therapist can explain that mindfulness refers to being present and purposeful in one's experience in a way that allows one to pay attention to the moment, and what is felt, thought and experienced in that moment. Part of being mindful is paying attention to any interfering, distracting, thoughts as they come into your mind, acknowledging those thoughts, but then redirecting your attention back to the present experience. The therapist will explain that it is

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The therapist will explain “The Synchronizing Breath” to the couple and provide them with a handout which explains the other types of partnered breathing activities. The therapist will suggest they try one or as many of the exercises as they would like, encouraging them to try the breathing exercise during the week, repeating it at least one more time. The therapist can remind the couple that these breathing exercises may seem silly, and that silly is good. They should still try it and embrace and accept any “giggles” or “awkward” feelings.

SESSION 2 HANDOUT #1

Mindfulness breathing instructions

Choose a moment during which you know you will not be disturbed. If you want, put your phone on silent.

1. Lie down on your back or in a comfortable chair or sofa.
2. Place your hands just below your belly button. Close your eyes and imagine a balloon inside your abdomen. As you breathe in through your nose, imagine the balloon filling with air. As you breathe out through your mouth, imagine the balloon collapsing.
3. While exhaling, notice the sensation of calm and relaxation that you are bringing forth with this type of breathing.
4. Without judgment, take notice of what you are feeling both in your body and noticing in your mind. As you take notice of these sensations, keep returning your focus to your breath, and the rise and fall of your abdomen.
5. After 1 deep breath, breathe normally for 30 seconds (approximately).
6. Allow your limbs to relax, become heavy, and sink into the chair.
7. Repeat this sequence 5-6 times once a day or more.

If intruding thoughts or worries cross your mind, imagine that your mind is a sieve and that all the thoughts just pass through its holes. To reduce holding onto these thoughts, keep returning your attention to your breathing.

SESSION 2 HANDOUT #2

Tantric breathing for two (Kuriansky, 2004)

Below are three types of tantric breathing exercises to try with your partner. Together, find a quiet moment during the week to try the first breath. If possible, repeat the exercise again during the week. Feel free to try all three breathing exercises. You will find that they are ordered in terms of level of complexity. The more you try them, the easier and more natural they will feel.

1) "The Synchronizing Breath"

Breathe in and out at the same time to tune into each other's rhythm. Facing one another, sit cross-legged and comfortably, using pillows if you wish. Make sure to keep your spine straight. Use a small touch of the hand or fingertips, or wink to help pace one another. After a minute or two, close your eyes and continue breathing together, and work on sensing the other's energy and breath.

2) "The Reciprocal Breath"

In this exercise, the tantric principle is to send your love into the other. Sit cross-legged in front of one another, or lying down facing each other, maybe sharing one pillow, almost nose-to-nose. The goal is to inhale while your partner exhales, and exhale while your partner inhales. Your faces should be close or almost touching for this exercise and your hands can be pressed against one another or touching. Imagine as though you are breathing for one another.

3) "The Circulating Breath"

This exercise has you sitting with your partner in a more intimate position. It is your choice, and you can try this breathing exercise clothed and unclothed. For the position, the partner will sit, cross-legged, and the woman with PVD will sit or straddle her partner so that they are face-to-face, and can touch their palms together, on top of her partner. When you inhale, imagine the energy rising through your body, passing through your core, through the top of your head and, as you exhale, imagine the energy looping back down to the base of your spine and genitals. You and your partner will inhale and exhale together – each picturing the circulating breath through each of you and imagining a harmonizing or synchronization of this breath.

***** If you find it too invasive to breathe in as your partner breathes out (i.e., breathe in your partner's face), you may choose to do this exercise cheek-to-cheek so that you feel your partner's breath on your ear and neck. This alternative positioning may help avoid discomfort the first few times you try the breathing exercises, as well engage other senses (i.e., hearing and touch), and therefore help you and your partner be present and aware of each other. *****

SEMAINE 2 EXERCICE #2

Respiration Tantrique pour deux (Kuriansky, 2004)

Voici trois types d'exercices de respiration tantrique à essayer avec votre partenaire. Ensemble, trouvez un moment de calme pendant la semaine pour essayer le premier exercice de respiration. Si possible, répétez l'exercice une autre fois au cours de la semaine. Sentez-vous libre d'essayer les trois exercices de respiration. Vous verrez qu'ils sont classés en termes de niveau de complexité. Plus vous les essayerez, plus vous les trouverez faciles et naturels.

1) « La Respiration Synchronisée »

Inspirez et expirez en même temps, pour régler votre rythme l'un à l'autre. Face à face, asseyez-vous confortablement les jambes croisées, en utilisant des oreillers si vous le souhaitez. Veillez à garder votre colonne vertébrale bien droite. Utilisez un petit toucher de la main ou du bout des doigts, ou un clin d'œil, pour vous aider à vous rythmer l'un à l'autre. Après une minute ou deux, fermez les yeux en continuant à respirer ensemble, et essayez de sentir l'énergie et le souffle de l'autre.

2) « La Respiration Réciproque »

Dans cet exercice, le principe tantrique est d'envoyer votre amour dans l'autre. Asseyez-vous les jambes croisées l'un en face de l'autre, ou couchez-vous face à face. Si vous êtes couchés, vous pouvez partager un oreiller pour vous retrouvez presque nez à nez. L'objectif est d'inspirer pendant que votre partenaire expire, et d'expirer pendant que votre partenaire inspire. Vos visages doivent être proches ou presque se toucher pour cet exercice et vos mains peuvent être pressées les unes contre les autres, ou simplement en contact. Imaginez que vous respirez l'un pour l'autre.

3) « La Respiration Circulante »

Cet exercice vous permet de vous assoir avec votre partenaire dans une position plus intime si vous le voulez, vêtu ou non. Lorsque la femme s'assoit sur son/sa partenaire face à face, tandis que le/la partenaire s'assoit les jambes croisées, les mains se touchent paume contre paume et les visages se touchent presque. Lorsque vous inspirez, imaginez l'énergie grandir à travers votre corps, en passant à travers votre cœur et le dessus de votre tête. Lorsque vous expirez, imaginez l'énergie redescendre en boucle vers la base de votre colonne vertébrale et de vos organes génitaux.

*** Si vous trouvez trop invasif de respirer dans le visage de votre partenaire, vous pouvez choisir de faire cet exercice joue contre joue de sorte que vous pourrez sentir la respiration de votre partenaire sur votre cou et votre oreille. Cette position alternative pourra vous aider à éviter l'inconfort les premières fois que vous essaierez ces exercices de respiration. De plus, cette façon de faire sollicitera un autre sens (c.-à-d. l'ouïe), et vous aidera tous les deux à être présents et conscients l'un à l'autre.***

Session 3

- Review homework
- Discussion: Facilitating emotional disclosure and subsequent validating responses
- In-session exercise: Communication for both partners

Homework:
Communication Tips and Turning Toward Your Partner's Needs
Continuation of pain journaling
Continuation of breathing exercises

Review homework
The therapist should take a few minutes at the beginning of each session to review the homework from previous sessions. The therapist will check in with the journaling for both partners and ask how they experienced the breathing exercises presented in the previous session.

Some couples may want to speak about conflicts or stay on certain topics longer than others. If this is the case, and to help stay on task, the therapist may remind couples that there are several opportunities to discuss a variety of topics throughout the therapy and can point to certain sessions that will allow for discussions about pain, sex, or the relationship.

Discussion: Facilitating emotional disclosure and subsequent validating responses
Communication is an important tool that will help the couple navigate the PVD pain and their shared sexuality. It can be one of their greatest assets in feeling more like a team and working together. It can also be helpful for the couple in other areas of their relationship. The therapist should emphasize that every couple communicates differently, and that the following information and exercises are meant to help them facilitate their communication. This will also mean that the therapist will explore their established communication styles, and related feelings and thoughts about their communication.

An important consideration: The therapist should consider information gathered during the assessment session and should open the discussion about communication by using positive examples of their communication that is specific to the couple, even if this example relates to finances, work, or something unrelated to their sex lives. Distressed couples will experience communication as more challenging, and couples should be validated that communicating when upset or hurt is more difficult.

The therapist will explain the importance of emotional disclosure and validating each other's disclosure in terms of improving communicating with one another. Specifically, the therapist will highlight how this becomes important when communicating about the PVD pain, their sexuality, and their relationship. The therapist can explain that emotional disclosure and "I" statements can be more effective than accusing or blaming "You" statements. The therapist will also explain the concept of validation—validation refers to feeling understood, listened to and cared for by one's partner.

Starting the discussion of what communication looks like for the couple:
The overarching question that the below questions help build is: *What do you need to feel understood?* By using the questions below, the therapist can help work up to this question.

When do you feel understood by your partner? How do you know (i.e., what are the signs?) that your partner is listening and understanding what you are saying with regard to the pain and/or sex? When do you not feel this way (what are the signs)? What would help you to feel listened to? What would be a way of communicating when you are starting to feel unheard?

The therapist will provide each member of the couple with the Communication Tips handout. The therapist will go through the handout with them, explaining the components of "I" statements and "active listening". The therapist will ensure that the couple understands the communication concepts and invite them to ask questions.

In-session exercise: Communication for both partners
The therapist will explain the exercise Turning Toward Your Partner's Needs and how this exercise builds on the previous discussion. Referring to the Communication Tips and Turning Toward Your Partner's Needs handouts, the therapist will invite the couple to each practice stating one of the items from the Needs List using the communication skills they have collectively identified as helpful. The therapist will instruct the couple to use the communication skills (e.g., "I statements" and "active listening") and to practice validation during this exercise. The therapist will help coach the couple through this exercise, and model when necessary. If there is time, the therapist will invite them to each come up with their own Need Statement relating to their pain or the impact of pain on their relationship and sexuality and to again practice their skills.

The 4-step process of communication has many more steps than a couple might be used to, and it can also make the couple feel as though they are being "taught" communication. The therapist can move through these steps slowly with the couple and should present them as a guide for the exercise. It will be important to check-in with each couple regarding which components of the 4 steps they found the most helpful, and to point out that these steps will either blend together or become more second-nature with practice. In fact, many couples are used to the first 3 steps and find that identifying the "need" as something new. The therapist can frame stating their need as providing their partner with the opportunity to succeed. Without it being stated, it will be hard for either partner to work towards the need being met.

Homework:

- Communication Tips and Turning Toward Your Partner's Needs
- Continuation of pain journaling
- Continuation of breathing exercises

Communication Tips and Turning Toward Your Partner's Needs
Each member of the couple should already have a copy of the Communication Tips and Turning Toward Your Partner's Needs handouts. The therapist will encourage them to find a moment during the week to have a discussion using these techniques and to continue practicing. The therapist will

SESSION 3 HANDOUT #1

Communication Tips

Below are some suggestions for how to improve your communication about difficult topics such as PVD and sex.

1) Choose an appropriate time for broaching the subject
    a. It may be helpful to set a time aside in advance, so your partner does not feel caught off guard.
    b. Choose a time when both partners feel they have enough energy (i.e., not too tired) and are relaxed enough to engage in the conversation.
2) Use **"I" messages**
    a. "I" messages allow you to express to someone your need for them to change their reactions or behaviors, without blaming them or putting them down.
    b. Speaking from the "I" and stating one's feelings is more likely to create a positive atmosphere for communication and problem-solving and is less likely to be met with defensiveness.
    c. <u>How to do it:</u> There are 4 parts to an "I" message. Not all parts need to be used (you may wish to postpone stating what you want to happen/change to allow a discussion of possible options) and you don't need to say the message in this order either.
        i. "I feel . . ." (state the feeling)
        ii. "When you . . ." (state the other person's behavior)
        iii. "Because . . ." (state the effect on you)
        iv. "I need . . ." (state what you want to happen)

I feel disappointed
When you turn away from me in bed
Because it makes me feel like you might not care/are not attracted to me
I need a cuddle or a touch (even if it doesn't lead to sex) to know you care/are still attracted to me.

3) Try to be an **active listener**
    a. *Encourage* your partner's efforts at talking to convey your interest (verbal & nonverbal).
    b. *Clarify* what your partner is saying by asking questions.
    c. *Reflect* back your partner's feelings to check that you understand. If you misunderstood, gently let your partner know you did not understand, and allow your partner to gently restate what they meant to say.
    d. *Validate* your partner's feelings, efforts, and actions. Show respect for your partner's intentions.
    e. *Restate* and *summarize* the basic ideas, facts, and feelings expressed by your partner to show that you understood what they said and to establish a basis for further discussion – this should be done thoughtfully and with the intention to continue the conversation.

SEMAINE 3 EXERCICE #1

Trucs de communication

Ci-dessous sont listées quelques suggestions pour aider à améliorer votre communication sur des sujets difficiles tels que la douleur (VP) et la sexualité.

1) Choisissez un moment approprié pour aborder le sujet
    a. Il peut être utile de déterminer un temps à l'avance de sorte que votre partenaire ne se sente pas pris(e) au dépourvu.
    b. Choisissez un temps où les deux partenaires sentent qu'ils ont assez d'énergie (c.-à-d. pas fatigué) et sont assez détendus pour engager une conversation.

2) Utilisez **les messages au «Je»**
    a. Les messages au «je» vous permettent d'exprimer à quelqu'un votre besoin qu'il change de réactions ou de comportements sans les blâmer ou les rabaisser.
    b. Parler au «je» et exprimer ses sentiments est plus susceptible de créer une atmosphère positive pour la communication et la résolution de problème en plus d'être moins susceptible d'être accueilli par une attitude défensive.
    c. <u>Comment le faire:</u> Il existe 4 parties à un message au «Je». Toutes les parties n'ont pas besoin d'être utilisées (vous pourriez vouloir retarder la déclaration de ce que vous désirez comme changement ou action pour permettre une discussion des options possibles) et vous n'avez pas besoin de dire le message dans cet ordre non plus.
        i. «Je me sens . . .» (exprimez le sentiment)
        ii. «Lorsque tu . . .» (dites le comportement de l'autre personne)
        iii. «Parce que . . .» (exprimez l'effet sur vous)
        iv. «J'ai besoin . . .» (exprimez ce que vous voulez)

3) Essayez de faire de l'écoute active
    a. *Encouragez* les efforts de votre partenaire à parler pour démontrer votre intérêt envers ce qu'il/elle dit (verbal et non verbal).
    b. *Clarifiez* ce que votre partenaire vous dit en lui posant des questions.
    c. *Reflétez* à votre partenaire les sentiments qu'il/elle a exprimé pour vérifier votre compréhension. Si vous n'avez pas bien compris, laissez-lui savoir doucement et permettez lui de reformuler ce qu'il/elle voulait dire.
    d. *Reformulez* and *résumez* les idées de base, les faits et les sentiments exprimés par votre partenaire pour lui montrer que vous avez compris ce qu'il/elle a dit et pour établir une base pour de futures discussions.
    e. *Validez* les sentiments de votre partenaire, ses efforts et ses actions. Démontrez du respect pour les bonnes intentions de votre partenaire.

SESSION 3 HANDOUT #2

Turning toward your partner's needs

INSTRUCTIONS: Read the list below and select a need that you have from it. Then take turns describing the need you selected to your partner by incorporating "I" messages

I feel (state feeling)…
when you (state behavior) …
because (state effect on you) …
I need (state what you want to happen)

If you are the listener, try incorporating active listening techniques:
Encourage, clarify, reflect, restate and summarize, validate

Both of you should try making suggestions about how you can better meet this need in the coming week.

Needs list (some examples of needs people may have)

I need more physical affection
I need to cuddle more
I need to talk more about the pain
I need more patience (for myself or from you)
I need to talk more about sex
I need to talk about feeling guilty
I need to talk about how we talk about sex
I need for us to have a date night
I need to have some time alone
I need help with housework or chores
I need to know you find me attractive
I need to do more things together
I need more or less family time
I need more alone time with you

SEMAINE 3 EXERCICE #2

Se tourner vers les besoins de votre partenaire

INSTRUCTIONS: Lisez la liste ci-dessous et sélectionnez un besoin que vous ressentez. Ensuite, décrivez à tour de rôle le besoin que vous avez sélectionné à votre partenaire en intégrant les messages au «je».
Je ressens (exprimez le sentiment)…
Lorsque tu (dites le comportement) …
Parce que (exprimez l'effet sur vous) …
J'ai besoin (exprimez ce que vous voulez)

Si vous êtes l'auditeur, essayez d'intégrer les techniques d'écoute active:
Encouragez, clarifiez, reflétez, reformulez et résumez, validez

Chacun de vous devrait essayer de faire des suggestions à propos de comment il serait possible que ce besoin soit mieux comblé dans la semaine qui suit.

<u>Liste de besoins (quelques exemples de besoins que les personnes peuvent avoir)</u>

J'ai besoin davantage d'affection physique
J'ai besoin de me coller davantage
J'ai besoin de parler davantage de ma douleur
J'ai besoin davantage de patience (pour moi-même ou de toi)
J'ai besoin de parler davantage de sexe
J'ai besoin de parler du sentiment de culpabilité
J'ai besoin de parler de comment nous parlons de sexe
J'ai besoin que nous ayons une soirée romantique
J'ai besoin d'avoir du temps seul(e)
J'ai besoin d'aide avec les tâches ou les travaux ménagers
J'ai besoin de savoir que tu me trouves attirant(e)
J'ai besoin que nous fassions plus de choses ensemble
J'ai besoin de plus ou moins de temps en famille
J'ai besoin davantage de temps seul(e) avec toi

Session 4

- Review homework
- Psychoeducation: Re-conceptualizing pain and PVD as multifactorial (Gate-control theory of pain)
- In-session exercise: Identifying biopsychosocial factors that can influence pain and specific to the couple
- Psychoeducation: Models of sexual response
- Discussion: Understanding how pain can impact upon sexuality and the relationship for both members of the couple and encouraging their self-disclosure to one another about this issue

Homework:
Pain localization and 'discomfort desensitization'
Body-scan relaxation / meditation

Review homework
The therapist will review the couple's experience with homework and ask about their journaling. The therapist will ask the couple how they are experiencing all homework exercises so far. What challenges have they faced? What are potential work-arounds? What realizations have they had since starting the journal process?

Re-conceptualizing pain and PVD as multifactorial (Gate-control theory of pain)
This intervention, including the in-session completion of biopsychosocial factors that influence pain should be afforded 15-20 minutes.

Pain is multi-factorial. Many people unfamiliar with pain research and treatment are unaware of the influence of emotions, thoughts and behaviors, and the social context on pain. In this part of treatment, the therapist will discuss empirically identified emotions, behaviors and cognitions related to pain, as well as explore those experienced by the couple.

Gate-control theory of pain (Melzack & Wall, 1996)
From Karol, Doerfler, Parker, and Armentrout (1981): "Pain may begin with bodily damage or injury or with disease. A pain message from the site of injury is sent through a mechanism that works like a "gate to the brain." The brain then interprets this message. This gate can be partially or fully opened or closed, determining the amount of pain. A variety of physical, emotional, and mental factors may open or close the gate." The following is Melzack and Wall's (1996) gate control theory of pain and can be discussed with the couple, although the therapist should keep in mind that this model does not fully apply to painful intercourse.

Factors that open the gate
1. Physical factors
    a. Extent of injury or trauma to the area
    b. Readiness of the nervous system to send pain signals
    c. Inappropriate activity level – fatigue
2. Emotional stress

a. Depression
b. Anxiety
c. Worry
d. Tension
e. Anger

3. Mental factors
    a. Focusing on the pain
    b. Boredom due to minimal involvement in life activities
    c. Nonadaptive attitudes

Factors that close the gate

1. Physical factors
    a. Medication
    b. Counter-stimulation (cold, massage, acupuncture)
    c. Appropriate activity level
2. Relative emotional stability
    a. Relaxation
    b. Positive emotions (e.g., happiness, optimism)
    c. Adequate rest
3. Mental factors
    a. Life involvement and increased interest in life activities
    b. Intense concentration
    c. Adaptive attitudes

Start identifying biopsychosocial factors that can influence pain specific to the couple

The therapist will emphasize the potential for the woman to perceive her pain differently, to develop awareness of its multifactorial nature, to accept her pain and what contributes to it, and to control her pain and discomfort. The therapist should try to include the partner in this discussion as well while being careful that the partner does not point out only the factors that contribute to more pain (i.e., blame). The therapist can provide a handout of gate-control/biopsychosocial model for the couple to complete together with the therapist. This may help them visualize and understand the many factors associated with the woman's pain, and with the pain experience for the couple. The therapist should keep this handout in the couple's file, for future use during a discussion of pain journaling – i.e., to see what else has been added to the contributing factors.

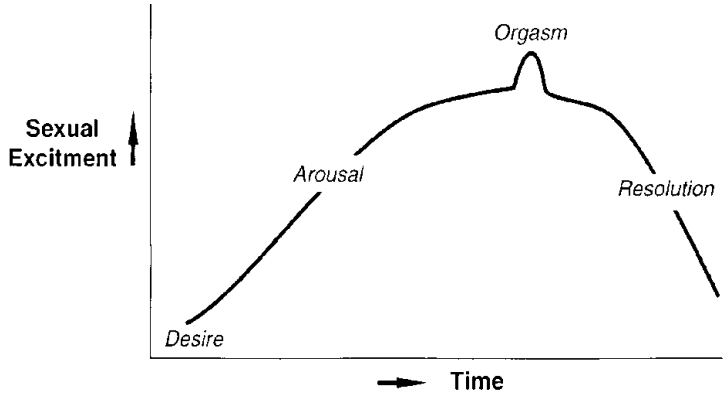
During the listing of the above factors, or afterwards, the therapist will ask the woman and her partner, "How does this gate-control theory or way of understanding pain sit with you? Which factors mentioned match your experience with the pain? What additional factors do you believe play a role?"

Psychoeducation regarding sexuality and models of sexual response

This psychoeducation exercise can be presented as an extension to the discussion stemming from the card-sorting task. By this point, sex has likely been alluded to during treatment, but not explored and discussed at great length. The therapist will take the time to discuss the couple's views on sexuality, their own sexual narratives, and their understanding of sexual response. During this part of treatment, the therapist should be sensitive to individual variations when identifying with the couple their conceptualization of sexuality. This way, information that is provided can be adapted to their sexual narrative. The therapist might say "Sex is often portrayed as including kissing, "foreplay" and intercourse and orgasm, but sex or the sex narrative is unique to each person and

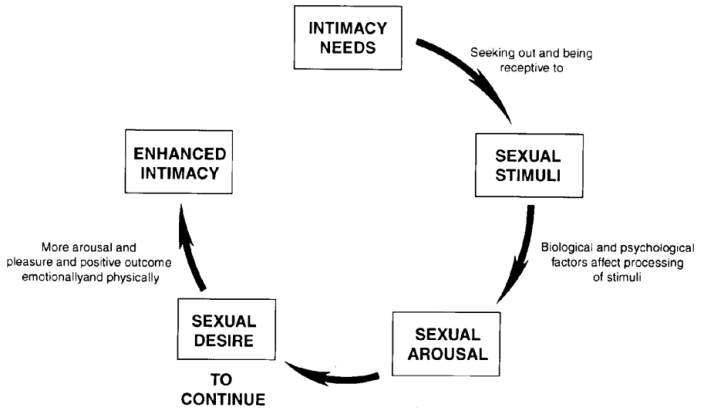
couple and can include many other behaviors as well as emotional and interpersonal components. When you think of sex, what does the whole process include for you?" The therapist should ask both members of the couple to describe what sex means to them.

Traditional model of sexual response cycle
The therapist will explain that there have been changes to our understanding of the sexual response cycle over the years, particularly to reflect that motivations for sex go beyond biological urges. The therapist will explain the traditional model below, which indicates that there is desire, then excitation (vasocongestion of the genitals), then orgasm (reflexive muscular contractions), and resolution or a *denouement* (Kaplan, 1979).



Additional perspectives on sexual motivations and sexual response
The therapist will explain that more recent research provides alternative understandings of sexual response or sexual desire and arousal. The traditional model of sexual response can give the impression that desire for sex is almost spontaneous, that one desires sex and thus pursues it, primarily due to an innate or biological urge. Research has shown, and your experience may reflect this as well, that there are many other reasons that motivate people to have sex. Equally, there are a variety of reasons, aside from a lack of desire or arousal, for not wanting to have sex. One study found that women with PVD reported multiple goals related to sexual activity that go beyond wanting to avoid pain, including many reasons why they continue to have sex despite the pain, such as a desire to maintain intimacy, pleasure a partner, avoid a partner's disappointment, or for fear of losing one's partner (Elmerstig et al., 2008).

A circular model of sexual response illustrates how the motivation for closeness can sometimes fuel sexual desire, and how desire and arousal can contribute to one another. It also highlights how sexual response does not always behave in the same linear order for each sexual experience (Basson, 2001).



"There are also a variety of factors that can influence the different phases of sexual response described in the traditional model of sexual response. Research has demonstrated that there can be a disconnect between our subjective experience of sexual arousal (i.e., when we say we feel aroused or "turned on") and our bodies' physiological response (Chivers & Bailey, 2005). While at other times, you may feel quite turned on, or be faced with something or someone that is arousing (like your partner!), but something else (the pain!) competes for your attention or distracts you and therefore dampens or drowns out the desire or arousal (Janssen & Bancroft, 2007).

For example, you may really want to have sex because you want to feel emotionally close to your partner, but then the thought or memory of the pain might put the "breaks" on your desire and arousal, or it may be hard to experience orgasm and pleasure when one has interfering thoughts about the pain."

The therapist will also mention that desire/arousal are not the only phases of sexual response that can be inhibited. That is, it can be hard to experience pleasure and orgasm when one has interfering thoughts about the pain, whether it is about the experience of pain (for the woman with PVD) or fears of contributing to the pain (for the partner).

Discussion of which "model" is most consistent with the couple's experience
Following an explanation of the sexual response model and factors that can influence difference aspects of the model, the therapist will ask each member of the couple about which aspects resonate with their experience, and which differ.

Understanding how pain can impact upon sexuality and the relationship for both members of the couple and encouraging their self-disclosure to one another about this issue
The therapist will discuss the impact of pain on thoughts, feelings, physical sensations and behavior, and in return the impact that thoughts, feelings, and physical sensations such as arousal might have on the pain experience. The therapist will explain to clients the details of the vicious cycle and continue to educate them about the impact of penetration pain on desire, arousal and orgasm, having them generate their own examples: How has their sex life changed since the pain?

In a study conducted by our research group, 86% of participants, who were women with PVD, reported having vaginal intercourse for reasons other than their own desire (e.g., feeling obligated). In addition, 24% of women stated not being able to have intercourse at all because of the pain. For women who are still having intercourse, some of the difficulties reported included lubrication or arousal problems because of the pain, trouble reaching orgasm, lesser frequency of intercourse, negative attitudes toward sex, and avoidance of sex. Overall, there is an important deterioration in sexual function and satisfaction associated with PVD pain.

What are some of the consequences the couple has noticed in their sexual functioning? What have been the consequences for the woman? What have been the consequences for the partner? How do they feel about these changes? What does experiencing pain during intercourse mean to the woman and her partner?

PVD can have a tremendous impact on the life of the couple. Long term, it can result in relationship conflict, sexual frustration, feeling pressured to have sex, a fear of losing one's partner, and the partner feeling powerless.

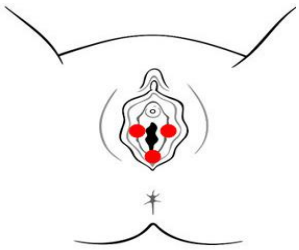
The therapist will explore some of the ways the couple feels their relationship has been impacted upon by the pain.

Homework:

- Pain localization and 'discomfort desensitization'
- Body scan relaxation and meditation

Pain localization and 'discomfort desensitization'—an activity for both partners
The therapist will present this activity as an exercise for the couple to do together. The goal is to demystify the location of the pain, and to alleviate discomfort and taboo that the woman and her partner may have about the woman's genitals. This activity may be illuminating for both the woman and her partner, particularly for those who have not identified the exact location of the pain. This may also be considered as a team problem-solving exercise. The therapist will explain the rationale of the activity and may use the below diagram to show the couple the area of the pain (generally between 3 and 9 o'clock). The therapist will explain that this is a diagram, and that each woman has a different symmetry and shape. The therapist will refer couples to the following website to provide examples of vulvas. It should be note that some women with PVD have strong fear and disgust reactions to the idea of viewing images of vulvas, the therapist should prepare the couple in advance as to what to expect when visiting the website. The therapist might encourage the woman with PVD to use her breathing or body scan exercises as a coping strategy just prior to viewing the website.

https://dodsonandross.com/articles/betty-dodsons-original-vulva-sketches-liberating-masturbation

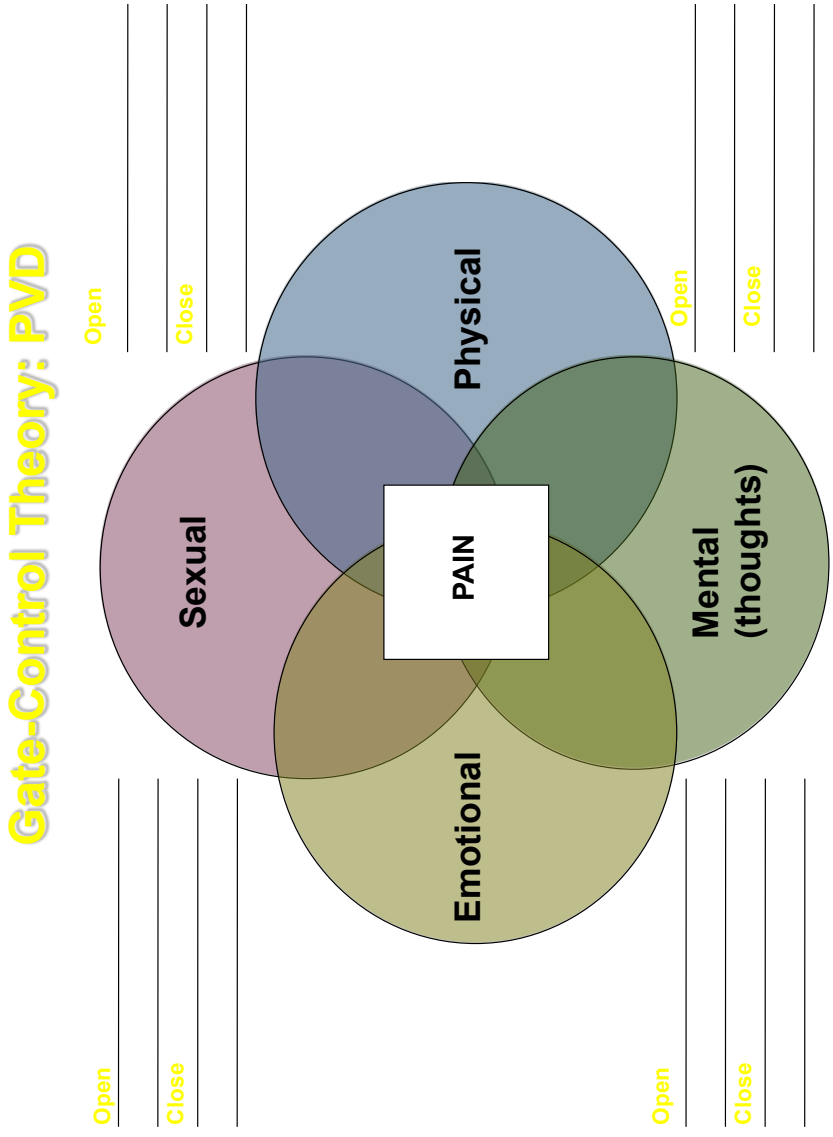


http://www.nva.org/whatIsVulvodynia.html

Body-scan relaxation/meditation
This exercise is adapted from Jon Kabat-Zinn's Body-scan exercise in Full Catastrophe Living (Kabat-Zinn, 1990). The therapist will introduce the Body-Scan Meditation exercise as another method of relaxation (and anxiety reduction) for the woman and her partner. This exercise is a mindfulness exercise.

The therapist will provide each of them with a copy of the handout and explain how they can take each other through the exercise at home. The rationale for this exercise is similar to that of diaphragmatic and mindfulness breathing, such that a relaxed state can counteract the tension that contributes to increased pain, and therefore help lessen pain. Moreover, the therapist can explain how the identification and deepened connection with one's body is particularly important when one feels disconnected from the body or as though one's body has betrayed them, as can be the case with people who experience chronic pain.

SESSION 4 IN-SESSION HANDOUT



SESSION 4 HANDOUT #1

Pain localization and discomfort desensitization

During the session, we identified where the pain is located on the image. The goal of this activity is to identify where your pain is located with your partner. This activity will help you and your partner to clearly identify where it hurts, and may diminish perceived radiation (i.e., spread) of your pain. In addition, this exercise may help break down the taboo and discomfort that is associated with your genitals and with PVD through exposure.

This exercise will involve being naked in front of your partner in a context that is not sexual. It may be new for some, and normal for others. You should have a hand-mirror nearby.

Choose a moment during which you know you will not be disturbed, and where both of you are able to relax. If necessary, silence phone notifications and unplug the landline. If the idea of doing this exercise makes you a bit nervous, take a bath before starting, engage in another activity that usually helps you to relax, or use the breathing techniques from the previous session.

Observe your genitals attentively, using the mirror. Touch different points to see where the pain is located. If you are comfortable, invite your partner to touch different points (lightly, of course) so your partner may understand where the pain is located as well. What's important here, for you and your partner, is to identify exactly where it hurts and where it does not hurt. The goal is not to test the pain or make it hurt.

If you try the exercise once and find that it's not working out (e.g., you're feeling uncomfortable, etc.), it's ok to try again or repeat it a second time, a third time, etc., until you feel relatively at ease and are able to make it through with your partner and identify where it hurts exactly. If you find this activity particularly challenging, you may want to add an extra step. For example, you could try the activity alone first, and then ask your partner to join you. Or you could try conducting the exercise over your underwear first, and then try the activity as described.

While observing your genitals, you can both note your own reactions and that of the other. This includes everything that goes through your head, without censuring or censoring yourself. For example, you may find this exercise awkward, it may give you the "giggles" or it may seem really challenging. You might also experience certain reactions towards the appearance of your genitals, such as being curious about their shape, the way they feel and even their smell, etc. The key is to note the content of your thoughts and feelings, but without judgement.

Website showing different examples of vulvas, these are pencil drawings that Betty Dodson made as part of her workshops and books to help teach women about masturbation and the individual variability in the shape and appearance of the vulva:

https://dodsonandross.com/articles/betty-dodsons-original-vulva-sketches-liberating-masturbation

SEMAINE 4 EXERCICE #1

Localisation de la douleur et désensibilisation à l'inconfort

Au cours de la séance, nous avons identifié où la douleur se situe sur l'image. Le but de cette activité est d'identifier avec votre partenaire où est localisée votre douleur. Cette activité vous aidera, vous et votre partenaire, à identifier clairement où vous avez mal, et pourra diminuer l'impression de rayonnement (c.-à-d. la propagation) de votre douleur. De plus, cet exercice pourra vous aider à briser le tabou et l'inconfort associés à vos organes génitaux et à la vestibulodynie provoquée.

Cet exercice impliquera d'être nue en face de votre partenaire, dans un contexte qui n'est pas sexuel. Cela peut être nouveau pour certains, et normal pour d'autres. Vous devrez avoir un petit miroir à main près de vous.

Choisissez un moment lors duquel vous savez que vous ne serez pas dérangés, et où tous les deux serez capables de vous détendre. Si nécessaire, débranchez le téléphone ou activez votre boîte vocale. Si l'idée de faire cet exercice vous rend un peu nerveux, prenez un bain avant de commencer, engagez-vous dans une autre activité qui contribue généralement à vous détendre, ou utilisez les techniques de respiration apprises lors de la séance précédente.

Observez attentivement vos organes génitaux en utilisant le miroir. Touchez différents points pour voir où la douleur est située. Invitez votre partenaire à toucher différents points (délicatement bien sûr), afin qu'il/elle puisse lui/elle aussi comprendre où la douleur se situe. Ce qui est important ici, pour vous et votre partenaire, est de déterminer exactement où vous avez mal et où vous n'avez pas mal.

Si vous essayez l'exercice une fois et que vous trouvez qu'il ne fonctionne pas (par ex. parce que vous vous sentez mal à l'aise, etc.), répétez-le une seconde fois, une troisième fois, etc., jusqu'à ce que vous vous sentiez relativement à l'aise pour le faire avec votre partenaire et identifier exactement où vous avez mal. Si vous trouvez cette activité particulièrement difficile, vous pouvez ajouter une étape supplémentaire. Par exemple, vous pouvez essayer l'activité seule d'abord, et ensuite, demander à votre partenaire de se joindre à vous. Ou encore, vous pouvez d'abord essayer de faire l'exercice par-dessus votre sous-vêtement, puis ensuite essayer l'activité décrite.

Tout en observant vos parties génitales, chacun devez noter vos propres réactions et celles de votre partenaire. Cela inclut tout ce qui vous passe par la tête, sans vous censurer vous-même. Par exemple, vous pouvez avoir certaines réactions envers l'apparence de vos organes génitaux, leur odeur, etc.

Site Internet montrant différents exemples de vulves :
http://dodsonandross.com/blogs/carlin/2010/05/bettys-vulva-illustrations

SESSION 4 HANDOUT #2

Body-scan relaxation/meditation
(Adapted from Jon Kabat-Zinn's technique in Full Catastrophe Living)

Goal of this exercise: The goal of this exercise is two-fold. First, this exercise will help you to get in touch with your body, to learn to attend to its sensations and feelings, and to learn to be mindful and accepting of those sensations, in a non-judgemental manner. The second goal is to practice the act of being mindful, which is a form of relaxation. By scanning your body using the script below, you will learn to focus on each body part so that it can relax, with the ultimate benefit of leaving you completely relaxed as well. Body scan relaxation is another technique for bringing about a 'relaxation response'.

In this meditation you simply notice the feelings, you become aware of them. You do not try to actively change them. They will relax on their own. You will see at the end of the relaxation session that you may feel a stress/anxiety/pain relief simply because this is a desired after-effect of the body scanning relaxation.

How do I do it?

We recommend that you practice the body scan once per day. Ask your partner to read the instructions to you at a pace that allows you to attend to each part of your body. You and your partner may want to make a recording of the instructions below. Eventually, you will be able to practice the scan without the instructions.

Find a comfortable space and lie on your back. You may choose to turn off your phone or silence the ringer. You may use a yoga mat or a camping air mattress. The aim is to be comfortable, but not to fall asleep during the exercise. Make sure you are warm enough. You could use a blanket if you like.

1) **Calmly let your eyes close.**
2) **Tune into the feeling of your breath as your abdomen rises and falls with your inhale and exhale.**
3) **Attend to your whole body in its entirety from your toes to the top of your head. Feel the sensation of your body's weight pressing against the floor.**
4) **Focus your attention on the toes of your left foot. While you are bringing your attention to your toes, direct your breathing toward your toes as well, so that your breath is flowing in and out from your toes. It can be helpful to imagine your breath flowing or traveling from your nose through your body to your toes and back.**
5) **Let yourself feel the sensations from your toes. If you find that you are not feeling anything, accept "no sensation" as the sensation.**
6) **Once you are ready to direct your breath and attention to the next part of your body, take a deeper breath all the way through your toes and bring your attention to the arch or sole of your foot. As you exhale this breath, allow the sensation from your toes to dissolve in your mind. Continue your breathing through each part of your body as you scan up through the top of your foot - - your heel - - your ankle. Observe your experience of the sensation as you breathe through each body part.**

7) **As you come to each region, breathe *with* that region as though breath is being drawn into that part of your body and let go as you transition to the next region.**
8) **If your attention has slipped elsewhere, focus your awareness and mind to the target body region. This will happen from time to time.**
9) **Move slowly up your left leg (ankle - - calf - - shin - - knee - - your upper leg - - your inner thigh - - your genitals - - your buttocks - - the base of your spine - -your lower back - - your abdomen - - your rib cage - - your chest - - your breasts - - your upper back - - your shoulders. Take the time to direct your attention to the fingers of both arms, and move up your arms simultaneously, tuning into the sensations of your wrists - -your forearms - - your elbows - - your upper arms - - your armpits, your neck - -throat - - your jaw - - your cheeks - - your nose - - your eyes - - your brow and the top of your head.**
10) **The final step is to breathe through the top of your head through your whole body. Tune into your whole body and take note of the sensations as they occur of their own will. Remember you are whole and breathe through these sensations. When you are ready, take a moment to lay still in the silence and calm. You may feel as though your body has melted away. When you are ready, return to your body as a whole. Intentionally and slowly move your hands and feet. You can even massage your face lightly before opening your eyes.**

*** *If you are feeling pain, attend to the sensation of the pain as you attend to other regions, breathe through it, accept the sensation and let go as you transition your attention back to where you left off in the scan. If your pain continues to pull your attention away, be aware of it, and continue re-focusing your attention to your continued scan.*

*** If you still have trouble staying awake during this exercise, try doing the body scan with your eyes open.

If you prefer to use a pre-recorded version of this exercise, there are many available on YouTube for free, be searching for “body scan meditation”.

SEMAINE 4 EXERCICE #2

Scan du corps
(Adapté de la technique de Jon Kabat-Zinn tirée du livre *Full Catastrophe Living*)

But de l'exercice: Le but de cet exercice comporte deux volets. Premièrement, cet exercice va vous permettre d'entrer en connexion avec votre corps, d'apprendre à porter attention à vos sensations et ressentis corporels et d'apprendre à être pleinement conscient(e) et acceptant(e) de ces sensations, sans porter de jugement. Le second but est de vous entraîner à la méditation pleine conscience, qui est une forme de relaxation. En effectuant un scan de votre corps, en utilisant le script ci-dessous, vous allez apprendre à focaliser votre attention sur chacune des parties de votre corps afin qu'elles se relaxent, avec le bénéfice ultime de vous amener à être totalement détendu(e). La relaxation par le scan du corps est une autre technique pour vous amener à éprouver une «réponse de relaxation».

Durant cette méditation, portez simplement attention à vos sensations et prenez conscience de ces dernières. N'essayez pas activement de les changer. Vous allez voir à la fin de la relaxation que vous pourriez ressentir un soulagement de stress/anxiété/douleur de toute façon, simplement parce que c'est un effet attendu suite à la relaxation par le scan du corps.

Comment le faire?

Il est recommandé d'effectuer le scan du corps une fois par jour. Demandez à votre partenaire de vous lire les instructions à un rythme qui vous permet de vous attarder à chaque partie de votre corps. Vous et votre partenaire pourriez vouloir faire un enregistrement des instructions ci-dessous. Éventuellement, vous serez capable d'effectuer le scan sans les instructions.

Trouvez un endroit confortable et étendez-vous sur le dos. Il est préférable d'éteindre votre téléphone portable. Vous pouvez utiliser un tapis de yoga ou un matelas gonflable de camping. L'objectif est d'être à votre aise, mais non de tomber endormi durant l'exercice. Assurez-vous d'être suffisamment au chaud. Vous pouvez utiliser une couverture si vous le désirez.

1) **Laissez vos yeux se fermer calmement.**
2) **Connectez-vous à la sensation de votre respiration alors que votre abdomen monte et descend selon vos inspirations et vos expirations.**
3) **Portez votre attention sur votre corps en entier, de vos orteils au dessus de votre tête. Ressentez la sensation du poids de votre corps pressé contre le sol.**
4) **Focalisez votre attention sur les orteils de votre pied gauche. Alors que vous y portez votre attention, dirigez votre respiration aussi vers vos orteils, de sorte que votre souffle circule de votre nez jusqu'à vos pieds. Il peut être utile d'imaginer votre souffle circuler ou voyager de votre nez par votre corps jusqu'à vos orteils et vice-versa.**
5) **Laissez-vous ressentir la sensation provenant de vos orteils. Si vous trouvez que vous ne ressentez rien, acceptez «l'absence de sensation» comme la sensation.**
6) **Une fois que vous êtes prêt(e) à diriger votre respiration et votre attention vers la prochaine partie de votre corps, prenez une respiration plus profonde vers votre pied jusqu'à vos orteils, et portez votre attention vers l'arche ou la plante de votre pied. Comme vous expirez, permettez à la sensation de vos orteils de se dissiper dans votre esprit. Continuez votre respiration à travers chaque partie de votre corps alors que vous continuez votre scan vers le**

haut, par le dessus de votre pied--votre talon--votre cheville. Observez votre expérience des sensations alors que vous respirez par chaque partie de votre corps.

7) **Alors que vous arrivez à chaque région, respirez avec cette région et laissez-la aller alors que vous faites la transition vers la prochaine région.**
8) **Si votre attention se dirige vers autre chose, focalisez votre concentration et votre esprit vers la région du corps visée. Ceci va se produire de temps en temps.**
9) **Bougez lentement vers le haut de votre jambe gauche (cheville - - mollet - - tibia - - genou - - le haut de votre jambe - - l'intérieur de votre cuisse - - vos organes génitaux - - vos fesses - - la base de votre colonne vertébrale - - le bas de votre dos - - votre abdomen - - votre cage thoracique - - votre poitrine - - vos seins - - le haut de votre dos - - vos épaules). Prenez le temps de diriger votre attention vers les doigts de chaque bras, et bouger vers le haut de vos bras simultanément, connectez-vous aux sensations de vos poignets - - vos avant-bras - - vos coudes - - le haut de vos bras - - vos aisselles, votre cou - -votre gorge - - votre mâchoire - - vos joues - - votre nez - - vos yeux - - vos sourcils et le dessus de votre tête.**
10) **L'étape finale est de respirer du dessus de votre tête à travers votre corps en entier. Connectez vous à votre corps en entier et prenez note des sensations au fur et à mesure qu'elles se produisent d'elles-mêmes. Rappelez-vous que vous êtes un tout et respirez au travers de ces sensations. Lorsque vous êtes prêt(e), prenez un moment pour rester étendu(e) dans le silence et le calme. Vous pourriez vous sentir comme si votre corps avait fondu. Lorsque vous êtes prêt(e), retournez à votre corps comme un tout.**
Bougez lentement vos mains et vos pieds. Vous pouvez même masser votre visage légèrement avant d'ouvrir vos yeux.

*** *Si vous ressentez de la douleur, porter attention à cette sensation de douleur alors que vous portez attention à d'autres régions de votre corps, respirez au travers de la douleur, acceptez cette sensation et laissez- la aller alors que vous reportez votre attention là où vous avez laissé le scan. Si la douleur continue de détourner votre attention, soyez-en consciente, et continuez de refocaliser votre attention vers votre scan continu.*

*** Si vous avez toujours de la difficulté à rester éveillé(e) durant cet exercice, essayez de faire le scan du corps avec les yeux ouverts.

Si vous préférez utiliser une version préenregistrée de cet exercice, merci de visiter ce site Internet :
http://rodalebooks.s3.amazonaws.com/mindfulness/02%20Meditation%202%20-%20The%20Body%20Scan%201.mp3

Session 5

- Review homework
- Discussion and psychoeducation: The role of anxiety/anticipation in pain and sex
- Discussion: Attitudes towards genitals for him and ger and ways to approach

Homework:
Kegel exercises

Review homework
The therapist can start by checking in with the couple's experience during the pain localization and discomfort desentization exercise. The therapist will ask, "What emotions did you experience? What did you learn from this experience?" The therapist will also review other homework exercises with the couple, such as the body-scan, noting that the homework is cumulative and they are adding more and more tools to their repertoire. How are they keeping up? The therapist will continue to problem-solve with the couple if they are finding it challenging to accomplish homework exercises during the week. Despite the cumulative collection of skills and tools from homework exercises, it should be noted that the couple is not expected to practice all homework exercises each week.

Discussion and Psychoeducation: The role of anxiety/anticipation in pain and sex
As highlighted last session, pain, as well as cognitive and emotional processes such as anxiety and anticipation can influence all phases of sexual response. The therapist will capitalize on the previous discussion to highlight how anxiety and anticipation of pain can impact upon the couple's sexual experiences. The therapist will explain how the anticipation of pain leads to anxiety which in turn inhibits arousal and can contribute to involuntary muscle contraction in the pelvic floor. Both of these things lead to more pain. Moreover, excitement about sex can quickly turn into inhibitory excitement, sometimes depleting one's sexual desire and making it difficult to tap into pain management techniques like breathing and relaxation, and the pleasure associated with sexual activity.

If the therapist is aware of a history of trauma or suspects a history of trauma for either member of the couple, they should exercise a mindful sensitivity throughout this discussion, with validation that trauma (neglect, abuse, coercion, or emotionally negative experiences with sex) may also contribute to anxiety and apprehension about sexual activity, even when that activity is now happening with a loving and safe partner. Understanding what has not felt safe or good about sex, if this is the case, will help create a clearer picture about the role of anxiety, anticipation, and apprehension. The therapist should use their clinical judgement and exercise flexibility if issues related to trauma are interfering with the treatment content and need to be addressed further before continuing with the proposed sequence of interventions therein. The book entitled *Developmental Couple Therapy for Complex Trauma: A Manual for Therapists*, by Heather MacIntosh, PhD, may prove useful in this respect.

The therapist can ask some of the following questions to both members of the couple, to guide the discussion: "How has pain contributed to your anxiety about sex and vice versa? What are your anxieties as they relate to sex? How do they influence the way you approach sex?" The therapist will help the couple link their pain, emotions, thoughts and behaviors using emotionally focused

questions and techniques. The therapist will explore emotional connections by highlighting the dynamic that might play out between the partners. For example: “If we were to “unpack” that emotion of anxiety, or in other words, look deeper into the emotional reaction to see what other emotions are involved (e.g., sadness, frustration), what might we find? What’s happening for you in that moment? And, in this moment, how are you experiencing sharing how you feel? And [partner without PVD], what’s happening for you when [woman with PVD] feels this way?”.

It is likely that avoidance of sexual activity will be raised as part of this discussion, or at a later moment for the couple. Avoidance as a coping mechanism does not allow the person avoiding ato address the unpleasant experience, and therefore it can take more and more space, rather than less. The therapist could even draw the following diagram for the couple – as anxiety increases, we engage in avoidance, which can level it off, but it never decreases, and instead keeps creeping up. This explanation helps illustrate how avoidance is not adaptive in terms of coping over the long term.

The therapist will encourage each person to speak directly to their partner, to avoid the passive voice and to explicitly state their emotions out loud in the first person (i.e., using the word “I” and sharing their needs). For example, if the woman says “I feel on edge, and all closed up, like I don’t want my partner to touch me at all. I need them to move slower.”. The therapist will say “Can you say that to your partner directly?” The goal is for the woman to say, “[Partner’s name], when we start being sexually intimate, I feel on edge, and closed up. I feel like I don’t want you to touch me at all. It would help me if you were patient with me or reassured me that we can go slow.” Then the therapist will ask how the woman feels in this moment. It is likely that sharing her emotions directly will conjure up the same feelings of anxiety. The therapist will ask the partner to describe their reaction in that moment when the woman is “on edge”. The partner may offer how they react to the woman with PVD not wanting to be touched and may offer reassurance because they realize that it is rooted in feeling anxious, or another reaction. The idea is to move back and forth between the emotional reactions, and to deepen the understanding and communication between the couple building on the communication skills presented in Session 2.

Discussion: Attitudes towards genitals

As a continuation to the above discussion, the therapist can introduce the concept of one’s own attitudes towards genitals as another contributing factor to sexual function. By opening this topic, the couple remains in exploration of their understanding of sexual function and their shared sexuality. The therapist can tie in the importance of this discussion with the pain localization exercise, and the images that were provided as part of the website on that handout.

“Attitudes towards genitals is an area of focus when a sexual dysfunction is present. It refers to how we feel and what we think about our genitals. For all people, genitalia come in all shapes and sizes, with different amounts of pubic hair, different symmetry, and different smells. Some people are more comfortable with their genitals than others, and some have never taken the time to look at their own genitals. Sometimes we don’t know how to feel because we have never really thought

about it or taken the time to look that closely. If I ask you now to reflect on all this, how do you feel about your genitals? How might your feelings about your genitals affect your pain and ability to enjoy sexual activities?"

The therapist will connect negative feelings about genitals to anxiety and thus pain as per the biopsychosocial model. "People with sexual problems can sometimes feel betrayed by their genitals (and bodies), because they may feel that things aren't working as they should be. But you are not your genitals, no more than you are defined by your knees, elbows, or hands. Having a positive attitude towards one's genitals is like having a positive attitude towards one's body, it will help contribute to a sense of comfort and confidence, which may translate into increased sexual satisfaction and decreased pain (e.g., via enhanced ability to communicate with your partner about sex).

Note for the therapist: It is rare, but this discussion can become emotionally charged for some couples if they are critical towards one another. In this case, the therapist should quickly defuse negative comments by asking for more sensitive re-framing and helping the clients unpack the negative feelings associated with any critical comment. In this instance, interrupting the member of the couple expressing negativity can help the therapist maintain a safe discussion for the couple. More commonly, women with PVD have a lot of negative feelings about their genitals (and are self-critical) and this can also contribute to a stronger emotional charge during this discussion. In this case, a mindful and compassionate approach is recommended to help debunk myths they may be carrying around and a validating approach for exploring the impact of these critical attitudes.

Homework:

- ❖ Kegel exercises

Kegel exercises
The therapist will introduce Kegel exercises for the woman and provide her with a copy of the handout. The therapist can link Kegel exercises to the importance of connecting with or tuning into one's own body and being mindful. Research has shown that the anxiety associated with anticipated pain can cause contraction and tensing of the vaginal muscles upon attempted intercourse, and that the pelvic muscles may even be more tense at rest. Together, these factors are associated with more pain. The therapist will suggest that the woman practice the contraction/relaxation exercises for 5 minutes each day. For many, the contract is easier than a slow relaxation. This can be paralleled to lifting a heavy weight – strength comes from also being able to set it down. The therapist will take a moment to ask the woman if there are any problems with this homework, and to explore potential solutions. If it will help with adherence, the therapist may encourage the woman to discuss the exercise with her partner (i.e., challenges, scheduling, how it feels, etc.).

SESSION 5 HANDOUT #1

Kegels

Goal of this exercise: The goal of this exercise is to increase your control over the muscles in your vagina so that you can relax them during intercourse and do this despite the pain. When you involuntarily contract those muscles, it contributes to increasing the pain intensity. It is thus a helpful skill to have in your toolbox, to learn how to relax those muscles.

How do I know which vaginal muscles to focus on?
To make contact with your vaginal muscles, try stopping the flow of urine the next time you go to the washroom. The muscles that will enable you to do this are the muscles that circle your vagina and urethra; these muscles are the ones you'll be working on during the Kegel exercises.

Instructions
1. Choose a moment during which you know you will not be disturbed. If necessary, turn off phone notifications and unplug the landline. To feel more at ease, you can also choose a room where you can lock the door or feel like you have privacy. But once you get the hang of it, Kegel exercises can be done almost anywhere.
2. If the idea of doing this exercise makes you a bit nervous, try another activity that usually helps you to relax first (e.g., mindfulness and relaxation breathing, breathing with your partner, play calming music, take a bath).
3. Kegel exercises are easy to do. Here are the steps:
   a) Start by engaging in diaphragmatic breathing for a few minutes
   b) Contract your vaginal muscles and hold the contraction for 5-10 seconds (count the seconds if you don't have an appropriate watch and start at lower end of the range).
   c) Then relax the muscles for the following 10-20 seconds.
   d) Keep alternating this way between the contraction and the relaxation up to a **sequence of 10 contractions-10 relaxations**. Relaxations should be twice as long as contractions. Try timing contractions and relaxations with your breathing, noting a few breaths for each.
   e) Practice **one sequence of Kegel exercises per day**.

Important: If you feel pain during the exercise, note it in the Pain Journal, just as for any other activity. Let your therapist know that it's painful to see if any adjustments should be made.

Talking with your partner: We encourage you to talk to your partner about how you find the Kegel exercises. What are your reactions? What have you realized about your body following the exercises?

SEMAINE 5 EXERCICE #1

Les exercices des muscles du plancher pelvien Kegel

But de cet exercice: Le but de cet exercice est d'augmenter votre contrôle sur les muscles de votre vagin afin que vous puissiez les relâcher complètement pendant la pénétration, et ce, malgré la douleur. Quand vous contractez involontairement ces muscles, ceci contribue à augmenter l'intensité de la douleur. Il est donc très important que vous appreniez à les relâcher.

Comment savoir sur quels muscles me concentrer?
Pour se mettre en contact avec les muscles de votre vagin, essayez d'arrêter votre flux urinaire la prochaine fois que vous allez aux toilettes. Les muscles qui vous permettront de faire ceci sont des muscles qui font le tour de votre vagin et de votre urètre ; ce sont ces muscles que vous allez travailler pendant les exercices des muscles du plancher pelvien Kegel.

Instructions
1. Choisissez un moment durant lequel vous savez que vous ne serez pas dérangée. Si nécessaire, déconnectez le téléphone ou activez le répondeur. Pour vous sentir plus à l'aise, vous pouvez aussi choisir une chambre que vous pouvez fermer à clé.
2. Si l'idée de faire cet exercice vous rend quelque peu nerveuse, commencez par faire une autre activité qui vous aide habituellement à vous détendre (par ex. respiration diaphragmatique, respiration en concert avec votre partenaire, prendre un bain)
3. Les exercices des muscles du plancher pelvien Kegel sont faciles à faire. Voici les étapes :
    a) Commencez par une respiration diaphragmatique pendant quelques minutes.
    b) Contractez les muscles de votre vagin et maintenez la contraction pendant 5-10 secondes (comptez les secondes si nous n'avez pas de montre appropriée), puis relâchez les muscles pour les 10-20 secondes suivantes.
    c) Continuez à alterner ainsi entre la contraction et le relâchement jusqu'à un maximum d'une **séquence de 10 contractions - 10 relâchements**. Les relâchements devraient durer deux fois plus longtemps que les contractions.
    d) Faites **une séquence d'exercices des muscles du plancher pelvien Kegel par jour**.

Important: Si vous ressentez de la douleur pendant cet exercice, notez-le dans le Journal de douleur et relations sexuelles, comme vous le faites pour toute autre activité.

Session 6

- Review homework
- Discussion and psychoeducation: Role of the partner and partner responses in women's pain experience and sexual satisfaction
- Discussion: Partner and woman responses in relation to sexual satisfaction
- Continuing communication and facilitating the quality of the relationship (e.g., brief communication skills training)

Homework:
Giving and receiving (Step 1 – Relaxing together and non-sexual massage)
Disclosing favourite intimate moments (sexual intimacy)

Review homework
The therapist should ask the couple how they experienced the homework exercises from the previous session. The therapist should always be looking for ways to help couples overcome challenges to homework but may need to remind couples that the homework exercises are theirs to use as they please. For example, if they have not completed the homework exercises, they should not feel they are not prepared for therapy.

Discussion and psychoeducation: Role of the partner and partner responses in women's pain experience and sexual satisfaction
The therapist will explain to couples that in addition to pain being influenced by thoughts, emotions and behaviors, pain can also be influenced by the social context or interpersonal factors. Research from the past few years has started to assess the partner's experience and has suggested that partner's experience psychological distress as well, depending on how they perceive the woman's pain. The therapist will explain that research with chronic pain patients, and also with women with PVD, has shown that the way the partner responds to the person with pain can lead to higher and lower reports of pain, as well as psychological and sexual outcomes like changes in anxiety and depression, and sexual function and satisfaction (N. Rosen, Bergeron et al., 2014; N. Rosen, Bergeron et al., 2015; N. Rosen, Muise et al., 2015). At the same time, it is important to know that partner responses can also be extremely helpful! One study reported that women who experience pain during intercourse list an understanding partner as the most helpful component when emotionally coping with vulvar pain (Gordon et al., 2003). Similarly, our own research has found that facilitative partner responses—that is, responses that express affection and adaptive coping with the pain—are linked to lower pain and better sexual function among women with PVD (N. Rosen, Bergeron et al., 2014; N. Rosen, Bergeron et al., 2015; N. Rosen, Muise et al., 2015). The therapist will exercise sensitivity when explaining this to the couple so as not to lay blame or guilt on the partner. One way to help present this information is to mention that the woman's own way of responding to her pain is important, and that her own responding to pain interacts with how the partner responds to the pain. Responses to pain are behaviors and communications, and just like any other behavior and communication it is important to understand their intention and our own reactions.

Before explaining the different types of responses identified in the scientific literature, the therapist will ask the couple about the ways they **each** respond to the woman's pain during or after

intercourse. Pain responses may include active and passive behaviors (e.g., getting more lubricant, hugging/kissing, switching to non-painful sexual activity, turning over in bed, etc.) and verbal expressions (e.g., expressing frustration, offering comfort, asking how he can help, etc.). The therapist can ask the couple what they believe is the impact of the various types of responses on the woman's pain, on the sexual interaction, and on both of them in terms of emotional reactions. The therapist will also ask the woman about her perceptions of partner responses and how she responds as a result, **highlighting the interaction between each person's responses**. This is intended to facilitate open-ended responding.

Research regarding partner responses to PVD
(Research information for the therapist)

Consistent with data from the chronic pain literature, women who perceived their partner as responding to their pain in a highly solicitous manner (concern, attention, support) or as high in negativity (aggression, hostility and resentment) reported higher pain intensity during intercourse (Desrosiers et al., 2008; N. Rosen, Bergeron et al., 2015) and poorer sexual function and satisfaction (N. Rosen et al., 2013; N. Rosen, Muise et al., 2015). N. Rosen and colleagues (2010) suggest that partner solicitousness may result in avoidance of sexual intercourse. Avoidance as a coping mechanism can increase cognitive-affective factors such as catastrophizing, anxiety and hypervigilance, which are associated with increased pain intensity (Desrochers et al., 2010; N. Rosen et al., 2010; Benoît-Piau et al., 2018). Negative partner responses may signal a lack of sensitivity and understanding of the pain, whereas solicitous responses signal the opposite. In this way, partner responses affect the interpersonal environment in which the sexual activity occurs, and consequently the sexual function and satisfaction.

Another type of partner response, facilitative responses, are thought to decrease avoidance of painful activities and negative cognitive-affective factors associated with pain (N. Rosen et al., 2013; N. Rosen, Rancourt et al., 2014). Facilitative responses are more approach-oriented and include encouraging the person's adaptive coping strategies, as well as expressions of affection and love (Schwartz et al., 2005). Higher facilitative partner responses, among couples with PVD, are associated with lower pain, as well as higher sexual function and satisfaction.

The therapist will explain that just as one's own responses (thoughts, anxiety, anticipation) about the pain can intensify or lessen the pain we experience, the partner's responses to pain and painful sex can impact upon pain intensity and sexual satisfaction. The response styles that have been most studied among women with PVD are solicitous, negative, and facilitative responses. Solicitous responses include those that demonstrate an exaggerated level of concern, attention and support. Negative responses include hostility, criticism, frustration, and ignoring the pain. Both greater solicitous and negative responses are associated with greater pain reported during intercourse and poorer sexual function and satisfaction. It has been suggested that solicitous responses might encourage avoidance and increase catastrophizing about the pain. Facilitative responses are those that encourage adaptive coping with the pain and include expressions of affection and love. Higher facilitative responses are associated with lower pain and greater sexual function and satisfaction. Therefore, facilitative responses are supportive in nature, but they are distinguished from solicitous responses because they help encourage adaptive coping or adaptive ways of approaching the pain, rather than avoidance (which tends to be associated with more pain). It is sometimes helpful to use

a non-sex/pain related example to illustrate this distinction. For example, contrasting a parent who responds to their child's scraped knee with exaggerated levels of concern (e.g., picks up and carries the child, fusses over the scrape for an extended period) vs. a parent who checks that the child is ok, gives them a band-aid, and then helps to reorient the child back to the fun activity they were doing. The therapist will ask the couple to reflect on and identify their own experiences with partner responses to pain, as well as how the woman responds to her own pain.

Using previously established strategies which focus on affect, the therapist will facilitate a discussion about how partner responses may **encourage** or **discourage** avoidance of sexual activity, but also intimacy in general, and **reinforce** or **help correct** cognitive appraisals of the pain (e.g., catastrophizing, self-efficacy) that in turn heighten pain. The therapist will also explore what types of partner responses have **validated** or **invalidated** efforts on the woman's part to manage her pain and engage in sexual activity, and what were the consequences of these responses for both partners. Here, validating the effort refers to supporting, encouraging or rewarding the effort (e.g., with praise or affection), whereas invalidating would refer to undermining or discouraging the effort (e.g., with criticism). The therapist will introduce the idea that each person's reaction can lead to cognitive-affective and behavioral reactions in the other, initiating a vicious cycle, and will explore the consequences of each person's reaction. The therapist may wish to refer back to the biopsychosocial diagram of PVD pain to illustrate this cycle and the role of partner responses. How does the woman's responses to her own pain (e.g., crying, anger, avoidance, apologizing, etc.) impact upon her partner's sexual and emotional experience? For example: "How do you typically react to your own pain? What happens for you [the partner] when the other person feels this way/reacts this way?" The therapist should highlight that the various partner responses may occur on different occasions, and it can be helpful to identify patterns so that we can work on increasing helpful responses and decreasing less helpful ones (e.g., patterns of responses may change when it has been a longer time between sex, or when sex is on a special occasion, or depending on who initiated sex, etc.).

Discussion: <u>Partner and woman</u> responses in relation to sexual function and satisfaction
Continuing with the previous discussion about partner responses, the therapist will remind couples of the types of partner responses already mentioned (e.g., facilitative, solicitous and negative), and ask the couples to discuss how they have experienced partner responses in relation to sexual function and satisfaction. For example, how do they believe partner responses (and the woman's responses) have influenced their sexuality and sexual satisfaction? The focus of this discussion will be the impact of one's reactions and responses on sexuality and sexual satisfaction, and not the impact of the pain itself.

Continuing communication and facilitating the quality of the relationship (e.g., brief communication skills training)
The therapist can inquire about ways in which the couple communicates about the pain and the areas of difficulty. If not already done in earlier sessions, the therapist can then teach them basic communication skills such as how to broach highly charged topics. For example, **when** to say something (e.g., reserve a time slot in advance so as not to take one's partner by surprise), or **speaking from the "I"** and **stating one's own feelings and needs**. The therapist can help illustrate by drawing on previous exchanges with the couple in therapy, pointing to the importance of speaking about how one feels in the first person without blaming the partner.

The therapist can discuss the disadvantages of not saying what is on their mind (e.g., if they say to their partner two years down the road that they do not enjoy some sexual behaviour or way of

approaching sex that has been present all along, the partner may be more upset than if they say it the first or second time the situation arises). Finally, the detrimental effects of avoidance can be highlighted (i.e., the less you talk about it, the bigger the problem becomes, and the harder the solutions are to implement because of the accumulated resentment that needs to be worked through).

Homework:

- ❖ Giving and receiving (Step 1 – Relaxing together and non-sexual massage)
- ❖ Disclosing favorite intimate moments (sexual intimacy)

Giving and receiving - an activity for both partners
The therapist will provide the couple with the Giving and Receiving handout. The therapist will explain the rationale for the exercise and suggest that the couple try Step 1 this week. This exercise presents an opportunity to be mindful, and the therapist will explain how to approach mindfulness during giving and receiving. The therapist will also go over how to provide feedback to each other while avoiding judgemental statements (i.e., instead of "I like that" try "That feels gentle and soft"). The therapist will remind the couple that mindfulness refers to paying attention to the moment, and what is being felt during that moment (see previous description of mindfulness). For certain couples (e.g., those with histories of trauma, suspected trauma, or couples in which the therapist assesses trust to be low or easily threatened), the therapist may suggest certain safe zones as part of this exercise. For example, the therapist can work with the couple to make this a safe exercise by checking in with both members of the couple about how they feel about the exercise and creating zones of the body which are "safe" to touch, and which ones should remain "off the menu" for the moment.

The book entitled *Sensate Focus in Sex Therapy : The Illustrated Manual* by Linda Wiener and Constance Avery-Clark may be useful for this portion of the treatment.

Disclosing favorite intimate moments (sexual intimacy) - an activity for both partners
In preparation for the next session's discussion relating to sexual communication, the therapist will suggest that the couple take 15 minutes during the next week to take turns disclosing their favorite intimate moment to one another. This could be anything from the first time they held hands to the first kiss, or to a time when they felt strongly desired by the other person, or felt strong desire for their partner. It could be a particular sexual encounter. It can be more sexual or less. The goal is to communicate a favorite moment, and to share why this moment stands out for them.

SESSION 6 HANDOUT #1
Giving and receiving

Rationale: The purpose of this exercise is to increase your awareness of what feels pleasurable to you and your partner while going at your own pace without the pressure of trying to create pleasure. The goal is to improve your skills at guiding each other toward what feels good for both of you without the pressure of sexual performance. A secondary goal is to practise the skill of being mindful. Mindfulness refers to being present and purposeful in one's experience in a way that allows one to pay attention to the moment, and what is felt, thought and experienced in that moment. Part of being mindful is paying attention to any interfering, distracting, thoughts as they come into your mind, acknowledging those thoughts, but then redirecting your attention back to the present experience. Another part of being mindful is taking a non-judgemental stance.

How do we do it? Choose a time when you will not be disturbed. It can be helpful to set up the right environment, perhaps by lighting candles, playing soft music, taking a bath, engaging in some tantric breathing with one another, or whatever else makes you feel relaxed and comfortable. It is recommended that you both undress.

One partner – the receiver – lies down on a bed or yoga mat in a comfortable position, on the stomach, back or side. The other partner – the giver – will take the role of the "toucher". For each step, the partners will switch positions. In other words, you and your partner take turns giving and receiving touch. Try spacing the steps out over the course of the next couple of weeks but set aside enough time so that both partners give and receive on each occasion.

1) Non-erotic massage, no genital touching
    a. The giver should not try to sexually arouse the receiver. The giver should focus on exploring, touching many parts of the receiver's body, noticing the various textures and sensitivities.
2) Touch/massage including some erotic/genital touching, but focus still on sensations and arousal, not orgasm or sexual performance
3) Touching in an erotic way for sexual pleasure, including orgasm if desired. Couples can also experiment with mutual touching at this step.

Being mindful: Pay attention to the moment, what you are experiencing and thinking. Acknowledge your thoughts, distracting and otherwise. Once you have acknowledged the thoughts, let them pass, and bring your attention back to your experience. Continue to be mindful of the sensations, emotions, and thoughts relevant to the present experience. This exercise does not include vaginal intercourse. You and your partner can of course choose to engage in intercourse or other sexual activities whenever you like during the week, but you are encouraged to refrain from intercourse when you are doing a step from this exercise so that you can focus specifically on giving and receiving pleasure.

Important: At each step, the receiver should provide non-judgemental feedback to the giver, and vice versa. The feedback should not include judgements. It should be more "informational". For example, "Your touch feels reassuring. Your touch feels tentative. You touch me slowly, what would happen if you touched deeper or more quickly? Your skin is soft. I notice you hold your breath when I touch your stomach. Next time I want to touch more slowly."

SEMAINE 6 EXERCICE #1
Donner et Recevoir du Plaisir

Rationnel: Le but de cet exercice est d'augmenter votre conscience de ce qui vous fait plaisir à vous et à votre partenaire, tout en respectant votre rythme. Le but est de favoriser vos habiletés à vous guider l'un et l'autre vers ce qui vous fait plaisir à tous les deux. Un autre but est de pratiquer l'habileté de pleine-conscience. La pleine conscience réfère à être présent et déterminé dans sa propre expérience d'une façon qui permette de porter attention au moment, et à ce qui est ressenti, pensé et vécu. Être en pleine conscience consiste aussi à porter attention aux pensées qui interfèrent ou qui sont distrayantes au fur et à mesure qu'elles arrivent, de les reconnaitre, puis de rediriger son attention vers l'expérience présente.

Comment on le fait? Choisissez un moment où vous ne serez pas dérangés. Ca peut être aidant de mettre en place un environnement propice, par exemple en allumant des bougies, en mettant de la musique douce, en prenant un bain, en faisant de la respiration tantrique ensemble, ou en faisant quoi que ce soit qui vous aide à vous détendre et à être confortables. Il est recommandé que vous vous déshabilliez tous les deux.

Un partenaire – celui qui reçoit – s'allonge sur un lit dans une position confortable, sur son ventre, son dos, ou sur le coté. L'autre partenaire – celui qui donne – prend le rôle de celui qui "touche". A chaque pas, les partenaires échangent de place. En d'autres termes, vous et votre partenaire alternez entre donner et recevoir du plaisir. Essayez d'étaler les étapes sur les quelques prochaines semaines, mais gardez assez de temps pour que les deux partenaires donnent et reçoivent du plaisir à chaque fois.

<u>Étapes</u>

1) Massage non-érotique, sans toucher génital
    a. Celui qui donne devrait essayer de ne pas exciter celui qui reçoit sexuellement. Celui qui donne devrait se concentrer sur explorer et toucher plusieurs parties du corps de celui qui reçoit, tout en remarquant les différentes textures et sensibilités.
2) Toucher/masser, incluant un peu de toucher génital/érotique, mais en se concentrant encore sur les sensations et l'excitation, et non sur l'orgasme ou la performance sexuelle
3) Toucher de façon érotique pour un plaisir sexuel, incluant un orgasme, si vous le désirez. Les couples peuvent aussi essayer un toucher mutuel à cette étape.

Être en pleine-conscience: Portez attention au moment, à ce que vous ressentez, et à ce que vous pensez. Reconnaissez vos pensées, qu'elles soient distrayantes ou pas. Une fois que vous les avez reconnues, laissez les passer, and ramenez votre attention à votre expérience. Continuez à être en pleine conscience quant à vos sensations, émotions, et pensées qui sont pertinentes pour le moment présent.

Cet exercice n'inclut pas de pénétration. Vous et votre partenaire pouvez, bien sûr, faire de la pénétration et des activités sexuelles quand vous voulez pendant la semaine, mais vous être encouragés à vous abstenir de la pénétration pendant les étapes de cet exercice pour que vous puissiez vous concentrer spécifiquement sur donner et recevoir du plaisir.

Important: À chaque étape, celui qui reçoit devrait faire des suggestions à celui qui donne, disant à son partenaire ce qui lui fait plaisir et ce qui est inconfortable. Celui qui donne doit aussi se rappeler de demander une rétroaction à celui qui reçoit.

Session 7

- Review homework
- Psychoeducation and discussion: Sexual communication
  - Discussion: Defining/redefining the sexual narrative in the context of pain, and "Outercourse"

Homework:
Relaxation breathing with visualization and dilation
Involving the partner in dilation exercises

Review homework
The therapist will take a few minutes to ask the couple how they experienced the Giving and Receiving exercise from last session. What were their reactions? How did the exercise make them each feel? How did they experience being mindful of what they felt and thought while touching and being touched?

Psychoeducation and discussion: Sexual communication

"Sexual communication pertains to the way we communicate our sexual desires, need, likes, and dislikes with our partner. It comprises how we talk about sex when clothed, and during the throws of sexual activity. It has to do with how we talk to one another about sex, and during sex. Is sex something you normally discuss? If so, what does a typical conversation look like? How do you wish it looked? What are some of the things that stop you from talking about sex with your partner? What helps you to feel more comfortable to speak about sexual matters with one another?"

Discussion: Defining/redefining sexual narrative and schemas in the context of pain, and 'Outercourse'
"Sometimes there's a divide between couples because of the way they see themselves in the sexual relationship (Perel, 2017). One partner might say, I'm an emotional person and I need to feel connected before having sex. The other partner might say, I'm more physical and I express my connectedness through being sexual. And these differences can contribute to sexual problems. Sometimes having an open conversation about how you see yourself sexually can be illuminating and help bridge a divide that you perceived to be there or help demystify one that was never really there to begin with. Our sexual schema is defined as the way we think about the sexual aspects of our self. A sexual schema is formed through previous experience and plays out in our current sexual experiences by determining how we interpret sexual information and how we behave sexually (Andersen & Cyranowski, 1994; Andersen et al., 1999). If I were to ask you each how you see yourself sexually, what would you say (e.g., romantic, adventurous, conservative, timid, etc.)? How do you each view your partner? The therapist will ask the partner to describe reactions to the other person's sexual schema. How do you think your schemas affect each other (do they work against or with each other)? How can we bridge the gap between the two?

The therapist will be building upon the couple's previously stated sexual narrative, or idea of what sex includes. Intercourse is often when couples experience difficulty during sexual activity. 'Outercourse' (often called foreplay and sometimes called sexplay) includes sexual activity other

than intercourse. It includes what is commonly labeled as "foreplay", caressing, heavy petting, kissing, manual sex such as mutual masturbation, oral sex, etc.

What are non-penetrative sexual activities that they each enjoy? What comes to mind when they think of a sexual encounter that doesn't include intercourse? The therapist will examine myths or perceptions of what it means to the couple to have a sexual relationship that focuses more heavily on outercourse. For example, some myths include that 'outercourse' is reserved for a period of time in the relationship where they were not ready to engage in intercourse, that it does not constitute sex, or that it cannot be as pleasurable as intercourse. Other myths and themes may relate to how the couple approaches sexual activity.

Other pertinent notions or themes to discuss with the couple during the 'outercourse' intervention are listed below, and discussion of these themes may depend on what has been previously discussed with each couple.

- **"Spontaneous vs. planned sex":** Couples may complain that they find it less sexy (or exciting) when they have to plan sexual activity. If this is the case, the therapist can explore what "spontaneity" means to the couple, and what "planning" seems to take away from their shared enjoyment of sexual activity. Alternatively, the therapist can also see if there are times when planning helped build excitement for the couple. It may be helpful to nuance previously established beliefs about "spontaneous sex" by exploring the types of planning that were utilized when they first started having sex (e.g., going on dates, shaving one's legs, getting waxed, bringing a condom, having mints or gum for one's breath, etc.), and how these differ with current scheduling challenges. Some couples may discount things they did in the past that helped enhance desire, arousal, and excitement (e.g., texting sexy innuendos, holding or touching hands, romantic date planning). It might be that couples discount these acts because they were not paying close attention to these efforts as a "means to an end" or did not feel anxious or pressured that these acts lead to sexual activity necessarily. The pressure of wanting to specifically achieve sex, in addition to the inhibiting factors associated with pain, and the fear of pain may make it more difficult for couples to engage in planning or may make the types of planning different than how they planned in the past. The therapist should validate the experience and feelings shared by the couple, and explore ways in which a less pressured/goal-directed, and more mindful approach might help the couple become reacquainted with simmering, flirting, setting the mood, arranging for a baby-sitter so that they can go out on a date, etc. The goal of this discussion can include helping "planning" to become fun and exciting for the couple, rather than another "chore" for them to tackle.

- **"Simmering":** Many couples will talk about the novelty and excitement 'foreplay' (outercourse activities) held at the beginning of their relationship, before they started having vaginal intercourse or including vaginal penetration in their sexual activities. While novelty, nervousness, and initial exploration of their shared attraction helped contribute to the excitement, "simmering" may have also played a role. In that sense, the couple may not have let things heat up too quickly or would have cooled things down when they got too hot so as not to rush their sexual activity. The therapist can ask couples if this resonates with their experience, and if they think it may be helpful way to approach their outercourse so that it does not seem like a step backwards, but another way to keep the fires burning (so to speak).

- **Adequate duration for intercourse:** A study by Corty and Guardiani (2008) quantified the opinion of expert sex therapists in North America and determined that, despite what is depicted in films, sit-coms, and mainstream erotica, "adequate" sexual intercourse (i.e., penis-in-vagina intercourse) has a duration of 3 to 7 minutes, with "desirable" durations lasting between 7 and 13 minutes. Many couples are surprised to hear this information, which is a great opportunity to discuss other pressures the partner and the woman may each feel in terms of sexual activity. In terms of the PVD pain and in line with the previous discussion of 'outercourse' options, the therapist can discuss with the couple the idea of decreasing the amount of time they focus exclusively on vaginal intercourse or vaginal penetration.

- **Orgasms are orgasms, simultaneous or not:** Some couples (or one member of the couple) will think that the most ideal way to achieve orgasm is together, simultaneously, and during intercourse. While this is often how the media portrays sexual climax, there is no one ideal that applies to everyone. For example, some people (men and women alike) prefer to be part of the other person's orgasm (as the "giver" and "witness"), and then to feel free to focus on their own pleasure. Simultaneous orgasms are not a myth but are certainly not the norm for many couples and are in fact quite rare. The therapist should encourage pleasure-focused activity, and continue the dialogue regarding 'outercourse', pressures the couple may feel, and problem-solve with the couple in terms of addressing these sexually related pressures. A continued discussion of what it means to be the giver of pleasure, and receiver of pleasure may also be pertinent at this time.

Homework:

- ❖ Relaxation (deep breathing) with visualization and dilation exercises
- ❖ Involving the partner in the dilation exercises

Relaxation with visualization and dilation exercises
As a first step in the homework for this week, the therapist will recommend that the woman with PVD to do her breathing exercises and to imagine or visualize penetration. The goal of this activity is to pair the idea of penetration with the relaxation response. The therapist will provide coping statements and suggestions for muscular and cognitive reactions to imagined penetration.

Vaginal dilation
The therapist will explain that the goal of dilation is (1) to **desensitize** oneself to the association of 'something inside the vagina equals pain' and to get acquainted with the feeling of having something inside the vagina while not experiencing any pain and while in complete control of the situation, and (2) to accomplish this in a **progressive** approach. Progressive increase (slow and steady) is an important component of this exercise. The therapist can also refer back to the gate-control theory of pain, that progressive exposure to "something inside the vagina" can help them slowly and safely approach the cues that might normally open the pain gate. The therapist will suggest that the woman try the visualization exercise before trying the dilatation. The therapist will ask the woman to do this type of exercise once a day, preceded by a relaxation exercise. Insertion should ideally be about 2 inches deep, but may start with less, depending on the woman's current level of pain and readiness for this exercise. The woman may use lubricant to facilitate insertion and may start with a cotton-swab if a finger is too difficult. As she develops more comfort, she can use other objects if she likes (e.g., carrot or zucchini covered with a condom – not a joke! and easily

purchased in varying sizes) or proceed with her fingers and her partner's. Some physiotherapists recommend dilation kits, which some women may already own. So long as a gradual approach is taken, the use of dilators should be acceptable for this exercise. Provide the couple with the handout and highlight the suggested progression of dilatation, which includes the partner. The therapist will ask if they envision any potential problems? Can they think of solutions?

SESSION 7 HANDOUT #1

Dilation

Goal of this exercise: The goal of this exercise is to desensitize yourself to the association of 'something inside the vagina equals pain' and to get acquainted with the feeling of having something inside the vagina while not experiencing any pain and while in complete control of the situation.

General instructions

- Choose a moment during which you know you will not be disturbed. If necessary, turn off phone notifications and unplug your landline phone. To feel more at ease, you can also choose a room where you can lock the door. If the idea of doing this exercise makes you a bit nervous, take a bath before starting, or engage in another activity that usually helps you to relax.
- Practice **one dilation exercise per day**. The sequence of exercises will serve as a model, although you will not always necessarily follow it precisely.
- As is evident by the sequence and the fact that you must do one exercise a day, you will often repeat the same exercise two or three days in a row, which will enable you to master it well.
- When you feel that you have mastered a given exercise, go on to the next one. You may progress slower or faster than the model sequence. Go at your own pace, making sure that you practice one exercise a day.

Instructions for dilation exercises

- First, do the breathing/relaxation exercise.
- Pair relaxation with visualization or thinking about penetration. If this brings up a lot of anxiety and tense sensations in your body, stay at this step a few more times before starting dilatation exercises.
- When ready, do your breathing/relaxation exercise and follow with a dilation exercise, starting with exercise 1 (insertion of your smallest finger).
- Once you have succeeded in inserting the finger, keep it inserted for about 5 minutes, continuing to take deep breaths.
    - You might not succeed right away. If you can't insert your finger, just touch the entry of your vagina with the tip of the finger. You can try inserting it farther the next time you do the exercise.
- Observe how you are feeling (anxious, frustrated, tired, etc.). Don't hang on to those emotions; concentrate on your breathing.
- If you feel pain during the exercise, note it in the Pain and Sex Journal, just as for any other painful experience.

<u>Gradation of dilation exercises</u>

This is a guide to progressing through the exercises. Remember to go at your own pace!

1. Insert smallest finger alone
2. Insert second smallest finger alone
3. Insert third smallest finger alone

4. Insert index or middle finger and move around gently
5. Insert partner's smallest finger yourself
6. Insert partner's index finger yourself
7. Have partner insert his index finger
8. Insert 2 of your own fingers alone
9. Have partner insert his index and move around gently
10. Have partner insert 2 fingers
11. Insert 2 fingers alone and move around gently
12. Have partner insert 2 fingers and move around gently
13. Using a comfortable angle, insert penis yourself with no thrusting
14. Using the same or another comfortable angle, have partner insert penis with no thrusting
15. Using a comfortable angle, attempt gentle thrusting, indicating to your partner what kind of thrusting hurts less.

SEMAINE 7 EXERCICE #1
Dilatation

But de cet exercice: Le but de cet exercice est de se désensibiliser à l'association «quelque chose dans mon vagin équivaut à de la douleur» et de se familiariser avec la sensation d'avoir quelque chose dans le vagin sans ressentir de la douleur, tout en ayant un contrôle total sur la situation.

Instructions générales

- Choisissez un moment durant lequel vous savez que vous ne serez pas dérangée. Si nécessaire, déconnectez le téléphone ou activez le répondeur. Pour vous sentir plus à l'aise, vous pouvez aussi choisir une chambre que vous pouvez fermer à clé. Si l'idée de faire cet exercice vous rend quelque peu nerveuse, prenez un bain avant de commencer, ou faites une autre activité qui vous aide habituellement à vous détendre.
- Faites **un exercice de relaxation par jour**. La séquence des exercices vous servira de modèle, toutefois, vous ne la suivrez pas nécessairement de façon précise.
- Évidemment, la séquence et le fait de faire un exercice par jour fait en sorte que vous allez souvent répéter le même exercice deux ou trois jours de suite, chose qui vous permettra de bien le maitriser.
- Quand vous sentez que vous avez maitrisé un exercice donné, faites le prochain. Il se peut que vous progressiez plus ou moins rapidement que la séquence modèle. Allez-y à votre propre rythme, en vous assurant que vous en faites un par jour.

Instructions pour les exercices de dilatation

- Premièrement, faites l'exercice de respiration/relaxation avec visualisation d'insertion.
- Ensuite, faites un exercice de dilatation, en commençant par l'exercice 1 (insertion de votre petit doigt).
- Une fois que vous avez inséré votre doigt avec succès, maintenez-le inséré pendant environ 5minutes, tout en continuant à respirer profondément.
    - Il se peut que vous n'y arriviez pas tout de suite. Si vous n'arrivez pas à insérer votre doigt, touchez simplement l'entrée de votre vagin avec le bout de votre doigt. Vous pouvez essayer de l'insérer plus loin la prochaine fois que vous faites l'exercice.
- Observez comment vous vous sentez (anxieuse, frustrée, fatiguée, etc.). Ne vous attardez pas à ces émotions; concentrez vous sur votre respiration.
- Si vous ressentez de la douleur pendant cet exercice, notez-le dans le Journal de douleur et relations sexuelles, comme vous le faites pour toute autre activité.

Gradation des exercices de dilatation

Ceci est un guide de progression des exercices. Rappelez-vous d'aller à votre rythme!

1. Insérez vous-même votre petit doigt
2. Insérez vous-même votre deuxième doigt le plus petit
3. Insérez vous-même votre troisième doigt le plus petit
4. Insérez l'index ou le majeur (troisième doigt) et bouger-le doucement
5. Insérez vous-même le petit doigt de votre partenaire
6. Insérez vous-même l'index du partenaire
7. Partenaire insère son index
8. Insérez vous-même deux de vos doigts
9. Partenaire insère son index et le bouge doucement
10. Partenaire insère deux doigts
11. Insérez vous-même deux de vos doigts et bouger-les doucement
12. Partenaire insère deux doigts et les bouge doucement
13. Insérez le pénis vous-même, sans poussées
14. Partenaire insert son pénis, sans poussées
15. Essayez des poussées douces, en indiquant à votre partenaire quel genre de poussée vous fait moins mal

Session 8

- Review homework
- Discussion: Problem solving – what's working and what's not working
- Psychoeducation and discussion: Facilitating sexual desire and arousal
- Psychoeducation: Introducing cognitive defusion

Homework:
Facilitating sexual desire and arousal
Continuation of giving and receiving (Step 2 – Relaxing together and non-sexual massage)
Continuation of pain and sex journaling

Review homework
The therapist should take a few moments to ask the couple how they experienced the homework exercises from the previous session. The therapist will ask the woman if she attempted the dilation exercises, and how they both feel about including the partner in the dilation exercises down the road.

Discussion: Problem-solving – What's working? What's not working?
Taking from previous discussions about how their sex life has changed since the pain started / over the course of their relationship, the therapist will assess and introduce and facilitate the idea of problem-solving for the couple. For example, have they started trying non-penetrative sexual activities? What changes or adaptations have they made? What adaptations have worked? Which haven't worked? What do solutions look like for the woman? For her partner? Have they come up with their own helpful ways of responding to the pain?

Psychoeducation and discussion: Facilitating sexual desire and arousal
Likely raised in previous sessions, many women report a decrease in desire and capacity to become aroused because they are anticipating the pain. The reverse is also true: the experience of pain leads to decreases in desire and arousal. Likewise, it is possible for the partner to feel a decrease in desire and arousal because of the negative associations (e.g., the woman's discomfort) with intercourse. The therapist will ask the couple to think about ways to facilitate their desire for sex and will help them make a list. In addition, the therapist will ask them to think about things that enhance their arousal and sexual excitement. If they are shy about this discussion, the therapist can start generating ideas herself (e.g., fantasy rehearsal, erotic material, discussing their frustrations with their partner in order to problem solve, setting the mood, lighting candles, showering together) and slowly bring them to do it themselves. The therapist can use humour to dissipate their discomfort if any. The therapist might also ask them to think about their entries in their Pain and Sex Journals by asking, "What ideas might those entries spark?"

How to facilitate desire and arousal

The desire and arousal discussions can be blended into one single discussion encompassing both dimensions. For some couples, discussions of desire may be more important, and for others it may be challenges to sparking and maintaining arousal that is more pertinent for discussion.

The therapist may refer back to the models of sexual response and normalize the idea that desire and arousal may not be spontaneous but can evolve and grow once sexual activity is initiated.

1) The therapist will ask the woman and her partner at what point before or during sex does the woman experience desire and/or arousal problems. The therapist will also ask the partner this question if the partner experiences desire and/or arousal problems. “Think back to those moments, what would help increase your desire and/or arousal?” The therapist will help by making the list or taking notes. The therapist will add some suggestions herself if necessary and discuss ways to implement these: What might prevent them from implementing those changes (e.g., the myth of simple, spontaneous sex)? How does the partner feel about the changes they may make in their sex life? The therapist will facilitate a conversation between the woman and her partner to discuss their feelings about these changes using previously developed techniques that centre on the clients’ emotions.

2) Could anything else besides anticipation of pain be inhibiting desire and/or arousal? The therapist can have them generate examples. For example, issues with receiving pleasure or being the focus of pleasure, feeling guilty that they have pain and that their partner has to put up with a "dysfunctional partner", difficulties in communicating preferences, especially regarding new ways to diminish or avoid the pain, focusing only on the partner’s arousal, negative body image, how to navigate when the partner without PVD is not in the mood for sex, etc. The therapist will help facilitate an exchange between the woman and her partner about these factors.

Psychoeducation: Introducing cognitive defusion of thoughts
The therapist will introduce cognitive defusion, which is a method of working with preoccupying or unhelpful cognitions. Cognitive defusion relates back to the concept of mindfulness.

It is the process of recognizing thoughts as just that – thoughts. Rather than altering the content of the thought, cognitive defusion works to reframe the context in which one has the thought. The therapist can explain that defusion is meant to help address the thoughts that tend to hold us hostage and reduce their power to negatively affect our lives. For example, a negative thought could be watched dispassionately as it passes through the mind, repeated out loud until only its sound remains, or treated as an externally observed event by giving it a shape, size, color, speed, or form. A person could thank their mind for an interesting thought, label the process of thinking (‘‘I am having the thought that I am no good’’), or examine the historical thoughts, feelings, and memories that occur while they experience that thought. Such procedures attempt to reduce the literal quality of the thought, weakening the tendency to treat the thought as what it refers to (‘‘I am no good’’) rather than what it is directly experienced to be (e.g., the thought ‘‘I am no good’’). Again, the idea is that thoughts are just thoughts. Cognitive defusion helps diffuse unhelpful thoughts of their power, lessening their ability to determine how we feel and act. The result of defusion is usually a decrease in believability of, or attachment to, private events rather than an immediate change in their frequency.

The therapist will ask each member of the couple to identify and share a thought related to the PVD pain, sex or their relationship that they believe might be problematic, or one that has been bothering them. The therapist will help coach and guide the couple through this process (i.e., identifying thoughts that seem to take hold of them or preoccupy them). In particular, this might be useful for thoughts like, “This is going to hurt.” and other thoughts that are in fact realistic and true for the couple. The therapist can assure couples that identifying their thoughts can be a difficult process at

first because thoughts are often so automatic and quick that we may not be aware of them. Increasing our attention to thoughts is a first step to reducing their influence and will get easier with time.

The therapist will encourage the couple to notice their thoughts over the coming week in preparation for beginning cognitive defusion in the following session.

Homework:

- Try one thing from their list of ways to facilitate sexual desire and arousal
- Continuation of giving and receiving (Step 2 – Relaxing together and non-sexual massage)
- Continuation of pain and sex journals

Try one thing from their list of ways to facilitate sexual desire and arousal - an activity for both partners
The therapist will provide the couple with the list of ideas regarding desire and arousal developed during the session. As an exercise for the week, the therapist will encourage them to select one of the ideas and try it out. The therapist will ask if they foresee any problems, or if there are any activities that seem more feasible or more exciting to try.

Continuation of giving and receiving (Step 2 – Relaxing together and non-sexual massage) - an activity for both partners
The therapist will ask the couple to engage in the Giving and Receiving exercise again so that they can try Step 2. The therapist will encourage them to engage in mindfulness during the exercise. For certain couples, it may be important for the therapist to remind them of their safe body zones.

Pain and sex journal
The therapist will ask the couple to read over their pain journal entries during the next week and to bring their pain journal entries with them to the next session. The therapist can point out that the journaling or reading of the journal may help them identify some of their preoccupying thoughts related to PVD pain, sex and the relationship.

SESSION 8 HANDOUT #1

List of ideas to facilitate desire and arousal
(To be completed during the session)

SEMAINE 8 EXERCICE #1

Liste d'idées pour faciliter le désir et l'excitation
(À compléter pendant la séance)

Session 9

- Review homework
- Continued discussion: Sexual desire and arousal
  - In-session exercise: Cognitive defusion – Defusing negative thoughts, beliefs and cognitive distortions related to pain (catastrophizing, hypervigilance, attributions, self-efficacy, etc.), the relationship and sex.
  - Psychoeducation and discussion: Attributions about pain
  - Follow-up: Pain and sex journaling check in – Any revelations to share?

Homework:
Practice cognitive defusion

Review homework
The therapist will check in with the couple about how they are experiencing the Giving and Receiving activity. How has it made them feel? What have they noticed? Have they run into any difficulty in trying it? If they have yet to try the activity, what could help them in trying? How did they experience practicing mindfulness during the activity or exercise?

Continued discussion: Sexual desire and arousal
The therapist will ask the couple to share their experience in trying one of their ideas to facilitate desire and arousal. How did it feel trying something from their list? What did they take away from trying something new? What are they taking away from this experience? How did applying arousal techniques work for the woman and her partner? Did they try any other items on their list and what was the outcome? The therapist can suggest more ways to increase sexual interest if these have not already come up (identifying sexual needs, reading and viewing erotic material, fantasizing, etc.). What might be preventing them from trying out some of the desire and arousal strategies that have been suggested? *Why do the things they know about sexual pleasure suddenly become irrelevant when they start to feel the pain?*

Research regarding pain-related cognitions
(Research information for the therapist)

Women with PVD report more catastrophizing about their pain (i.e., an exaggerated and pessimistic perspective) compared to control women reporting on other forms of pain (Pukall et al., 2002; Payne et al., 2007). Women with PVD also demonstrate higher levels of hypervigilance towards the pain when compared to a neutral stimulus (Payne et al., 2005). In addition, women with PVD tend to exhibit increased catastrophizing over the negative pain-related consequences for their partner and relationship (Granot & Lavee, 2005). Higher levels of catastrophizing and hypervigilance, as well as lower levels of pain self-efficacy (i.e., one's beliefs about one's ability to cope with the pain) have been found to contribute unique variance in predicting increased intercourse pain in women with PVD (Desrochers et al., 2009). Higher levels of pain self-efficacy were also found to be significantly associated with better sexual functioning (Desrochers et al., 2009). Moreover, there is evidence of a prospective relationship between cognitive variables and PVD, where higher levels of pain catastrophizing and lower levels of self-efficacy were shown to

predict worse treatment outcomes in a randomized trial evaluating cognitive-behavioral therapy (Desrochers et al., 2010).

In-session exercise: Cognitive defusion

The therapist will briefly re-explain cognitive defusion. "Our thoughts have a direct impact on the way we perceive and react to events that happen in our lives. Cognitive defusion is about learning to distance oneself from one's thoughts. The idea is to take a step back from one's thoughts so that they do not preoccupy us to the point of distraction or make us feel trapped. Defusion allows one to perceive thoughts as simply thoughts, and as passing words or images. The therapist can use the following metaphors to help illustrate the process of defusion (i.e., the process of distancing oneself or detangling oneself from one's negative or burdensome thoughts): cars passing by a house or along a street, clouds moving in the sky, waves rolling into the beach, trains pulling out of the station.

The therapist can provide this rationale for defusion: "Changing how you interact with your thoughts is important because the way you react to your pain has a direct effect on how you perceive this pain. Unrealistic thoughts about pain, such as catastrophizing, are linked to higher pain intensity, among other reasons because they provoke anxiety and anxiety is related to increases in pain intensity. These unhelpful thoughts also limit adaptive coping and can even maintain unproductive interactions between partners."

The therapist will introduce the following exercise by explaining that the intention is to learn one way of taking a preoccupying or unhelpful thought, and taking steps to label it as a thought, and then taking steps to create some distance between them and the thought.

I'm having the thought that (adapted from Hayes et al., 1999; Harris, 2009)

1) The therapist will, in turn, ask each member of the couple to state an unhelpful thought relating to the pain, sex, the relationship or the self in a short sentence. For example, "I'm not sexy because I can't have pain-free sex like everyone else."
2) The therapist will then ask the client to "fuse" with this thought for 10 seconds, encouraging them to get wrapped up in the thought. "This can be done by repeating it to yourself or focusing on this thought. Get wrapped up in it."
3) Next, the therapist will ask the client to "replay" or repeat the thought with these words in front of it: "**I'm having the thought** that…" The therapist will say the sentence for the client twice to emphasize the difference. The therapist will then ask the client to repeat it back, followed by another repetition. The therapist will ask them to repeat it one more time to oneself.
4) Then the therapist will ask them to repeat the thought again with these words in front of it: "**I notice** that I'm having the thought that…" The therapist will use the same method listed in step 3 to help the client get wrapped up in the new phrasing of the thought, and thus defusing the original thought.

Following this exercise, the therapist will explore the client's experience with this exercise. For example, "What happened for you during this process? Did you notice any changes in your connection to or experience of the thought? Did you feel yourself get further from the thought?" The therapist may want to repeat the exercise with each member of the couple if there is time. The therapist will follow up with the couple after the exercise and ask if they believe they can apply this

exercise outside of therapy. “When you have an unhelpful thought, do you think you could use this technique to distance yourself from the thought?”

Psychoeducation and discussion: Attributions about pain

Research regarding attributions about PVD pain
(Research information for the therapist)

Researchers investigated male partners’ attributions about vestibulodynia and found that partners who attributed the woman’s pain to internal causes (e.g., personal responsibility) demonstrated lower dyadic adjustment and higher levels of psychological distress (Jodoin et al., 2008). Negative forms of attributional dimensions (i.e., internal, women responsibility, global and stable) along with higher pain intensity for the woman, were correlated with greater psychological distress in male partners. Partners who perceive the pain as a pervasive and long-lasting problem may be less likely to utilize healthy forms of coping, may feel more helpless in the face of their female partners’ pain, and therefore are likely to experience more psychological distress (Jodoin et al., 2008). In a similar study examining women’s attributions about their own pain, results indicated that the more women perceived their vulvar pain as external, global and stable, taken together, the more relationship distress they reported (Jodoin et al., 2011). Addressing one’s attributions or beliefs about the pain may serve as an important pathway to lessening the negative consequences of chronic pain on romantic relationships. Internal and global (i.e., pervasive) attributions were associated with higher levels of dyadic adjustment, however, global attributions were also associated with greater psychological distress and lower sexual functioning (Jodoin et al., 2011).

The therapist will explore how each member of the couple views the pain, and to what they attribute the pain (e.g., the causes). What types of attributions has the woman made about her pain? And her partner? What do they believe causes the pain? Do they believe the causes are external or internal, or both? How do they expect the pain to change or not to change in the future? Does the pain affect all aspects of their life and sense of self, across all situations, or is it confined to certain aspects/situations? Why do they think it continues?

Causal attributions are how one explains the pain. These ideas may have already been raised in a previous session, however, the intention in this intervention is to highlight the impact these attributions can have. For example, the woman may perceive the PVD as all her fault, and therefore feel guilt, shame, or as though she is not a woman because of the loss and difficulty associated with their sexuality. The perception of it being her fault can lead to negative feelings, which in turn can lead to a behavioral consequence such as avoiding sex (as per the CBT model). Some partners feel responsible for the woman’s pain, or perceive the woman as being “the problem”. As part of this exploration, the therapist will explain that these are the attributions that each person makes about the pain. The therapist will go on to explain that the attributions that one makes about the pain can influence the quality of relationship, psychological distress for both partners and sexual function. The therapist can link this information back to the biopsychosocial diagram as well as the CBT model to illustrate the impact of attributions on pain, sexual, relational, and psychological functioning.

How do these attributions affect how they feel? How do they influence their behaviour (e.g., avoidance)? How can these attributions be reframed?

The therapist will explain that negative forms of attributions can be problematic. This intervention may involve psychoeducation and myth-busting. For example, partner attributions that are internal, place responsibility on the woman, are global and stable are the types of attributions that are associated with more psychological distress for the partner. Whereas the woman's attributions of the pain being external, global and stable (all at once) are associated with higher reports of relationship distress. The therapist can take some time with the couple to see if these elements are present in their attributions and continue re-framing with them.

Follow-up: Pain and sex journaling check-in
In addition to using the pain journal entries in the previous discussion, the therapist will ask each member of the couple if the process of keeping a pain journal, or in examining the entries in their pain journal has contributed to any new realizations about the pain or if they have noticed any patterns with regard to their pain (e.g., context), thoughts, or behaviours?

Homework:

- ❖ Practice cognitive defusion

Practicing defusion
The therapist will give each member of the couple a copy of the cognitive defusion handout. The therapist will explain the rationale of practicing cognitive defusion. The therapist can explain that their experience in pain and sex journaling will help with this exercise in that it may have helped identify some of their negative thoughts. The therapist will tell the couple to keep track of their experience with defusion using the provided grid during the week because they will discuss it next session.

SESSION 9 HANDOUT #1

Practicing cognitive defusion

Rationale: Our thoughts have a direct impact on the way we perceive and react to events that happen in our lives. The means we use to cope with a given problem can modify our perception of that problem. For example, the way you react to your pain has a direct effect on how you perceive this pain. Certain thoughts can take hold of us and keep us from doing the things we want to do, feeling good about ourselves and living our lives. Cognitive defusion is a technique whose goal is to help you distance yourself from your preoccupying or unhelpful thoughts, and therefore cope more effectively with the pain, thus enabling you to perceive it as less intense.

Instructions for defusion:

1) Take note of the preoccupying/unhelpful thought.
2) Take note of the thought's form – is it made of words, images or sounds? By taking the time to consider the form of the thought, you are taking steps toward identifying the thought for what it is, a thought, and toward demystifying the thought and its power to preoccupy you.
3) Take a moment to thank your mind for the thought, even if it is negative or unhelpful. This helps remind you that the thought came from your mind and is just a thought.
4) Try the exercise below. Keep in mind that structuring the thought into a simple sentence may make the exercise easier.

Below are the instructions for the exercise you tried during this week's session (from Harris, 2009). Remember to keep track of your experiences with these exercises. For example: How did they make you feel? What did you like about them? What did you notice during the process of defusion?

I'm having the thought that…

- Take the preoccupying/unhelpful thought and put it in the form of a short sentence.
- Just as you did with the therapist during this week's session, "fuse" with the thought for 10 seconds. Get caught up in the thought. Repeat it to yourself. Focus on it.
- Now, to yourself, replay this thought with these words in front of it: "I'm having the thought that…" Replay this at least three times to yourself.
- And now, replay it again with these words: "I'm noticing that I'm having the thought that…"

SEMAINE 9 EXERCICE #1

S'entraîner au désamorçage cognitif

Rationnel: Nos pensées ont un impact direct sur la façon dont nous percevons et réagissons face aux événements qui se produisent dans nos vies. Les moyens que nous utilisons pour faire face à un problème peuvent modifier notre perception de ce problème. Par exemple, la manière dont vous réagissez à votre douleur à un effet direct sur la façon dont vous percevez cette douleur. Ainsi, certaines pensées peuvent nous retenir et nous empêcher de faire les choses que nous avons envie de faire, de se sentir bien à propos de nous-mêmes et de vivre nos vies. Le désamorçage cognitif est une technique qui a pour but de vous aider à vous distancer de vos pensées négatives et donc de faire face de manière plus efficace à votre douleur, vous permettant de la percevoir comme étant moins intense.

Instructions pour le désamorçage:

1) Prenez note de votre pensée négative.
2) Remarquez la forme de votre pensée - est-elle constituée de mots, d'images, de sons? En prenant le temps d'évaluer la forme de votre pensée, vous faites des pas vers l'identification de votre pensée pour ce qu'elle est, une pensée, et vers la démystification de cette pensée et son pouvoir à vous préoccuper.
3) Prenez un moment pour remercier votre esprit pour cette pensée, même si elle est négative. Ceci aide à vous rappeler que cette pensée provient de votre esprit et est seulement une pensée.
4) Essayez l'exercice ci-dessous. Gardez en tête que de structurer la pensée en une phrase simple peut rendre cet exercice plus facile.

Ci-dessous se trouvent les instructions pour l'exercice que vous avez essayé en séance cette semaine (de Harris, 2009). Rappelez-vous de garder le fil de vos expériences lors de ces exercices. Par exemple : Qu'est-ce qu'il vous a fait ressentir? Qu'est-ce que vous avez aimé de cet exercice? Qu'est-ce que vous avez remarqué lors du processus de désamorçage?

J'ai une pensée qui…

- Prenez la pensée négative et mettez-la sous la forme d'une courte phrase.
- Faites ce que vous avez fait avec la thérapeute lors de votre séance cette semaine, fusionnez avec votre pensée pour 10 secondes. Laissez vous emportez par votre pensée. Répétez-vous-la. Focalisez sur elle.
- Maintenant, à vous-même, rejouez cette pensée en plaçant ces mots au commencement: «J'ai une pensée qui» Répétez-le au minimum 3 fois à vous-même.
- Et maintenant, rejouez la à nouveau avec ces mots: «Je remarque que j'ai une pensée qui…»

SESSION 9 HANDOUT #2

Practicing cognitive defusion for the partner

Rationale: Our thoughts have a direct impact on the way we perceive and react to events that happen in our lives. The means we use to cope with a given problem can modify our perception of that problem. Our way of thinking can also influence our partner's experiences. For example, the way you react to your partner's pain can have an impact on your perception and her perception of her pain. Certain thoughts can take hold of us and keep us from doing the things we want to do, feeling good about ourselves and living our lives, as well as impact upon our partner's experiences. Cognitive defusion is a technique whose goal is to help you distance yourself from your preoccupying or unhelpful thoughts, and therefore cope more effectively with the pain, thus enabling you to perceive it as less intense.

Instructions for defusion:

5) Take note of the preoccupying/unhelpful thought.
6) Take note of the thought's form – is it made of words, images or sounds? By taking the time to consider the form of the thought, you are taking steps toward identifying the thought for what it is, a thought, and toward demystifying the thought and its power to preoccupy you.
7) Take a moment to thank your mind for the thought, even if it is negative or unhelpful. This helps remind you that the thought came from your mind and is just a thought.
8) Try the exercise below. Keep in mind that structuring the thought into a simple sentence may make the exercise easier.

<u>Below are the instructions from the exercise practiced during this week's session (from Harris, 2009). Remember to keep track of your experiences with these exercises. For example: How did they make you feel? What did you like about them? What did you notice during the process of defusion?</u>

I'm having the thought that…

- Take the preoccupying/unhelpful thought and put it in the form of a short sentence.
- Just as you did with the therapist during this week's session, "fuse" with the thought for 10 seconds. Get caught up in the thought. Repeat it to yourself. Focus on it.
- Now, to yourself, replay this thought with these words in front of it: "I'm having the thought that…" Replay this at least three times to yourself.
- And now, replay it again with these words: "I'm noticing that I'm having the thought that…"

SEMAINE 9 EXERCICE #2

S'entraîner au désamorçage cognitif pour le/la partenaire

Rationnel: Nos pensées ont un impact direct sur la façon dont nous percevons et réagissons face aux événements qui se produisent dans nos vies. Les moyens que nous utilisons pour faire face à un problème peuvent modifier notre perception de ce problème. Notre façon de penser peut aussi influencer l'expérience de notre partenaire. Par exemple, la façon dont vous réagissez à la douleur de votre partenaire peut avoir un impact sur votre perception et la sienne de sa douleur. Ainsi, certaines pensées peuvent nous retenir et nous empêcher de faire les choses que nous voulons, de se sentir bien à propos de soi et de vivre nos vies, en plus d'avoir une influence sur l'expérience de notre partenaire. Le désamorçage cognitif est une technique qui a pour but de vous aider à vous distancer de vos pensées négatives pour vous aider à faire face à la douleur de façon plus efficace et ainsi, de la percevoir comme étant moins intense.

Instructions pour le désamorçage:

1) Prenez note de votre pensée négative.
2) Remarquez la forme de votre pensée - est-elle constituée de mots, d'images, de sons? En prenant le temps d'évaluer la forme de votre pensée, vous faites des pas vers l'identification de votre pensée pour ce qu'elle est, une pensée, et vers la démystification de cette pensée et son pouvoir à vous préoccuper.
3) Prenez un moment pour remercier votre esprit pour cette pensée, même si elle est négative. Ceci aide à vous rappeler que cette pensée provient de votre esprit et est seulement une pensée.
4) Essayez l'exercice ci-dessous. Gardez en tête que de structurer la pensée en une phrase simple peut rendre cet exercice plus facile.

Ci-dessous se trouvent les instructions pour l'exercice que vous avez essayé en séance cette semaine (de Harris, 2009). Rappelez-vous de garder le fil de vos expériences lors de ces exercices. Par exemple : Qu'est-ce qu'il vous a fait ressentir? Qu'est-ce que vous avez aimé de cet exercice? Qu'est-ce que vous avez remarqué lors du processus de désamorçage?

J'ai une pensée qui…

- Prenez la pensée négative et mettez-la sous la forme d'une courte phrase.
- Faites ce que vous avez fait avec la thérapeute lors de votre séance cette semaine, fusionnez avec votre pensée pour 10 secondes. Laissez vous emportez par votre pensée. Répétez-vous-la. Focalisez sur elle.
- Maintenant, à vous-même, rejouez cette pensée en plaçant ces mots au commencement: «J'ai une pensée qui» Répétez-le au minimum 3 fois à vous-même.
- Et maintenant, rejouez la à nouveau avec ces mots: «Je remarque que j'ai une pensée qui…»

Session 10

- Review homework
- Intervention and follow-up: Cognitive defusion revisited

Homework:
Continue practicing cognitive defusion and mindfulness
Continuation of Giving and receiving (Step 3 – Sexual touching and potential to focus on orgasm)

Review homework
The therapist will check in with the couple about how they experienced the cognitive defusion exercises, and keeping track of these experiences.

Intervention and follow-up: Cognitive defusion revisited
The therapist will discuss the cognitive defusion exercise with the clients. Did they notice a distancing from their negative thoughts? What did this feel like?

The therapist will practice another defusion exercise with the couple. The therapist will explain that this exercise is a guided meditation and builds upon previous mindfulness strategies discussed during the course of therapy. The therapist will remind the couple that mindfulness refers to bringing awareness to one's thought and feelings, without trying to hold onto, reject them or judge them.

Leaves on a stream (adapted from Harris, 2009)

1) Get into a comfortable position and close your eyes or find a point to focus on.
2) Imagine yourself sitting by the water, by a gently flowing stream. Picture that there are leaves floating past along the surface of the water. The stream and leaves can look however you like. They could be autumn leaves that have fallen, or green leaves. (Pause for 10 seconds as the client develops her or his own image).
3) For the next couple of minutes, take every thought that comes to your mind and place it on a leaf floating along the water. Let it float away. Do this with every thought, whether the thought it positive or negative, pleasant or painful. (Pause for 10 seconds so they can start to picture this).
4) If the thoughts stop, just take a few moments to watch the stream in your imagination. Your thoughts will start up again. (Pause for 20 seconds).
5) Let the water move at its pace. Do not try to slow it down or speed it up. (Pause 20 seconds).
6) If you happen to be thinking that "This is stupid" or "I can't do this", I encourage you to place those thoughts on a leaf. (Pause 20 seconds).
7) You may find some leaves get stuck and do not float away as fast as others. This is ok. Don't force it to float away.
8) If you are feeling bored, or impatient, take those feelings and place them on leaves. Let them float on by.
9) You may notice that some thoughts are going to grab you and it will be harder to focus on the stream and the exercise. Just as with the body-scan, this is normal and will happen. When this

happens, acknowledge that you have been hooked by a thought and gently turn your attention back to the steam and the exercise.

Following the last instruction, the therapist will allow the clients a few minutes to continue imagining their stream. The therapist will remind them periodically that it is normal for thoughts to grab their attention, and that as soon as they realize this and note it, that they should return their attention back to the exercise.

10) Now, we can bring the exercise to an end. Take your time in opening up your eyes or sitting up in your chair. Take a moment to look around the room – welcome back.

In turn, the therapist will ask the clients how they experienced this exercise. What did they notice? What types of thoughts moved along the stream more quickly? Which ones tended to grab or hook their attention? Did they find themselves trying to speed up or slow down certain thoughts or feelings? What was it about those thoughts? During this discussion, the therapist will explain that this exercise was not about rushing to create distance between one and one's thoughts, but to experience a "natural flow" of her or his thoughts.

If the couple is struggling with defusion or the therapist believes that defusion is contributing to an increased focus on the thoughts, or a fusion with the negative thoughts, the therapist will explore this experience with them. The therapist will identify "fusion" if it is occurring, and highlight the impact of one's thoughts (e.g., just how preoccupying some thoughts can be, or how much of our attention they can take). Following the exploration of the experience, the therapist may suggest selecting an unhelpful thought that has less charge and that can be phrased more simply as a means of practicing defusion.

The therapist will explore the following questions with both members of the couple regarding cognitive defusion: What were their reactions? What challenges did it pose? What did they like about it? Do they believe they will be able to use this strategy in the future? The therapist will gently encourage couples by highlighting that similar to other mindful exercises, this strategy may take time to learn and will take practice.

Homework:

- ❖ Continue practicing cognitive defusion and mindfulness
- ❖ Continuation of giving and receiving (Step 3 – Sexual touching and potential to focus on orgasm)

Continue practicing cognitive defusion and mindfulness – an activity for both partners
The therapist will provide the couple with a copy of Session 10 Handout #1, which outlines the steps for the same Leaves on a stream intervention that was accomplished during the session. The therapist will encourage them in taking turns walking the other through this exercise.

Continuation of Giving and receiving (Step 3 – Sexual touching and potential to focus on orgasm) – an activity for both partners
If the couple has not tried Step 3 of the Giving and Receiving exercise, the therapist can suggest that they take time to try Step 3 during the week. The therapist can explore any concerns or

challenges that they foresee with this activity. If the couple does not feel ready to try Step 3, the therapist will suggest that they do Step 2 again but explore reasons for avoiding Step 3 (lack or orgasm, discomfort with mutual pleasure, etc.). For certain couples, it may be important for the therapist to remind them of their safe body zones.

SESSION 10 HANDOUT #1

Leaves on a stream guided meditation and cognitive defusion exercise

Instructions: For this cognitive defusion exercise, you will need to take turns guiding one another by reading the instructions below. You may want to record the prompts so that you can be guided through the meditation together. In addition to the written guidelines below, you may also need a clock with a second hand to help you time each step. Together, you can set up a comfortable space in your living room in which you can each sit comfortably. You may even want to set your phones to silent so that you will not be interrupted. If you like, you can take a few minutes at the end to share some of the thoughts that grabbed you more than others, which ones moved more quickly down the stream, and any reactions.

Leaves on a stream (adapted from Harris, 2009)

1) Get into a comfortable position and close your eyes or find a point to focus on.
2) Imagine yourself sitting by the water, by a gently flowing stream. Picture that there are leaves floating past along the surface of the water. The stream and leaves can look however you like. They could be autumn leaves that have fallen, or green leaves. (Pause for 10 seconds as the meditator develops their own image).
3) For the next couple of minutes, take every thought that comes to your mind and place it on a leaf floating along the water. Let it float away. Do this with every thought, whether the thought it positive or negative, pleasant or painful. (Pause for 10 seconds so you can start to picture this).
4) If the thoughts stop, just take a few moments to watch the stream in your imagination. Your thoughts will start up again. (Pause for 20 seconds).
5) Let the water move at its pace. Do not try to slow it down or speed it up. (Pause 20 seconds).
6) If you happen to be thinking that "This is stupid" or "I can't do this", I encourage you to place those thoughts on a leaf. (Pause 20 seconds).
7) You may find some leaves get stuck and do not float away as fast as others. This is ok. Don't force it to float away.
8) If you are feeling bored, or impatient, take those feelings and place them on leaves. Let them float on by.
9) You may notice that some thoughts are going to grab you and it will be harder to focus on the stream and the exercise. Just as with the body-scan, this is normal and will happen. When this happens, acknowledge that you have been hooked by a thought and gently turn your attention back to the steam and the exercise.

Following the last instruction, the reader will allow the meditator a few minutes to continue imagining their stream. The reader can remind the meditator periodically that it is normal for thoughts to grab their attention, and that as soon as they realize this and note it, that they should return their attention back to the exercise.

10) Now, we can bring the exercise to an end. Take your time in opening up your eyes or sitting up in your chair. Take a moment to look around the room and welcome yourself back.

SEMAINE 10 EXERCICE #1

Feuilles sur le courant, méditation guidée

Consignes : Pour cet exercice de **désamorçage** cognitive, vous aurez besoin de guider l'autre personne chacun à votre tour en lisant les consignes ci-dessous. En plus des instructions écrites ci-dessous, vous pouvez aussi avoir besoin d'une montre ou d'une horloge et de l'autre personne pour vous aider à chronométrer chaque étape. Ensemble, vous pouvez mettre en place un espace confortable dans votre salon dans lequel vous pouvez chacun vous asseoir confortablement. Vous pouvez même vouloir mettre vos téléphones en mode silencieux afin que vous ne soyez pas interrompu. Si vous le souhaitez, vous pouvez prendre quelques minutes à la fin pour partager quelques-unes des pensées qui ont attirées votre attention plus que d'autres, lesquelles ont circulées plus rapidement sur le courant, et des réactions.

Feuilles sur le courant (de Harris, 2009)

1) Placez-vous dans une position confortable et fermez les yeux ou trouvez un point sur lequel vous concentrer.
2) Imaginez-vous assis près de l'eau, près d'un ruisseau qui coule doucement. Imaginez qu'il y a des feuilles flottant sur la surface de l'eau. Le ruisseau et les feuilles peuvent ressembler à ce que vous voulez. Elles pourraient être des feuilles d'automne qui sont tombées, ou des feuilles vertes. (Pause de 10 secondes afin que la personne prenant part à l'exercice de méditation développe sa propre image).
3) Pour les deux prochaines minutes, prenez chaque pensée qui vous vient à l'esprit et mettez-la sur une feuille flottant sur l'eau. Laissez-la flotter au loin. Faites ceci avec chaque pensée, que la pensée soit positive ou négative, agréable ou douloureuse. (Pause de 10 secondes afin que la personne puisse commencer à imaginer ceci).
4) Si les pensées s'arrêtent, il suffit de prendre quelques instants pour regarder le courant dans votre imagination. Vos pensées vont recommencer. (Pause de 20 secondes).
5) Laissez l'eau couler à son rythme. N'asseyez pas de le ralentir ou l'accélérer. (Pause de 20 secondes).
6) S'il vous arrive de penser que «C'est stupide» ou «Je ne peux pas le faire», je vous encourage à mettre ces pensées sur une feuille. (Pause de 20 secondes).
7) Vous pouvez trouver quelques feuilles coincées et qui ne pas flottent pas aussi vite que les autres. C'est correct. Ne le forcez pas à flotter.
8) Si vous ressentez de l'ennuie, ou de l'impatience, prenez ces sentiments et mettez-les sur des feuilles. Laisser-les flotter.
9) Vous pouvez remarquer que certaines pensées attirent votre attention et il sera plus difficile de se concentrer sur le courant et l'exercice. Tout comme avec le scan corporel, ceci est normal et se produira. Lorsque cela se produit, reconnaissez que vous avez été attiré par une pensée et dirigez doucement votre attention sur le courant et l'exercice.

Suite à la dernière consigne, le lecteur permettra à la personne prenant part à l'exercice de méditation de prendre quelques minutes pour continuer à imaginer le courant. Il lui rappellera périodiquement qu'il est normal que les pensées attirent son attention, et que dès qu'il s'en rend compte et qu'il le note, qu'il doit rediriger son attention sur l'exercice.

10) Maintenant, nous pouvons mettre fin à l'exercice. Prenez votre temps en ouvrant les yeux, ou en vous relevant. Prenez un moment pour faire le tour de la pièce du regard, et accueillez-vous à nouveau.

Session 11

- Review homework
- Discussion: Asserting oneself with one's partner
- Psychoeducation and discussion: Avoidance of sexual activities

Homework:
Homework exercises revisited

Review homework
The therapist will ask how the couple continues to experience the Giving and Receiving massage exercises. The therapist will also check in about other homework exercises that the couple may be incorporating.

Discussion: Asserting oneself with one's partner
The therapist will raise the topic of communication again. The therapist can reiterate how communication difficulties can create conflicts between partners, and that certain communication difficulties stem from lack of assertion. The therapist will begin by asking couples about their experiences with being assertive in their relationship. Are there certain areas that are more easily approached with assertion? The therapist will ask them to think of a relevant area of difficulty (e.g., initiation, arousal problems, asserting sexual needs, broaching the topic of sex, taking partners' frustration too personally, etc.) and discuss reasons why it is difficult for them to talk about some of these issues with their partners. What are the barriers or obstacles? What facilitates being assertive in areas where it happens more easily or naturally? It can be useful to explore the emotions associated with the area of difficulty being discussed. Moreover, it may also be useful to do some cognitive defusion with the couple regarding some of these issues, as well as reframing. The therapist should encourage the couple to do the cognitive defusion with one another, helping only to facilitate if necessary.

Psychoeducation and discussion: Avoidance of sexual activities
The therapist will help clients to identify if they have been avoiding sex. If relevant, the therapist will work at breaking avoidance habits if some of them are avoiding sex (this will be an ongoing task throughout the therapy): How do they avoid sex? Do they have unrealistic beliefs or less adaptive attitudes about sex? What are some of the reasons why they avoid sex? Pain is one, but what about activities that are not painful? What purpose might the avoidance serve for them as individuals and for the relationship—both benefits and costs? It is important to recognize and validate that avoidance also has benefits for one or both members of the couple. It has served a purpose of preventing pain, among other benefits. The therapist can take the time to validate experiences of avoidance and work towards other ways of coping. What about sexual activities do not involve pain? Can they practice these? Can they show their partner how they masturbate so as to avoid any pain? The therapist can lead the discussion toward the partner's reactions to the pain. How might these contribute to avoidance? This discussion may repeat issues previously discussed in therapy. The therapist should have them generate some potential ideas/solutions and suggest some themself if necessary. The therapist should potentiate the couples' own coping skills and give them the opportunity to develop their own solutions, while emphasizing the potential they have to control their pain. This is an opportunity to help them consolidate skills they have been building in therapy.

What else do they avoid? Intimacy in general? Does the couple avoid hugging/kissing for fear it will lead to painful sex? Depending on how the discussion evolves, the therapist may incorporate and encourage the couple to practice any of the interventions previously introduced in therapy during this discussion (e.g., cognitive defusion, validating/active listening, etc.)

Homework:

- ❖ Homework revisited (identify homework activities that were unsuccessful, very helpful or that went untried, and the couple will choose which to try or re-try)

Homework revisited
The therapist will ask the couple about their experiences with the homework exercises. The therapist will ask which ones were most successful or easy to complete. The therapist will enquire about which homework exercises slipped through the cracks or were attempted but unsuccessful. Their homework for the following week will be to re-try a homework that was previously attempted, or to try a homework that was never attempted. The therapist will explore the reasons for why the selected homework was not tried, etc. The therapist will ask the couple to identify the challenges associated with this particular exercise and explore potential solutions with the couple. The therapist should have copies of all handouts in case the couple has misplaced the handout for the selected homework exercise. The therapist should also be ready to explain any of the homework exercises again.

Session 12

- Review homework
- Discussion: Progress and setbacks
- Discussion: Summarizing information learned
- Psychoeducation and discussion: Tools for the future

Review homework
The therapist will follow-up with the couple about revisiting certain homework tasks. The therapist will take a moment to explore the couple's experience with re-trying a homework exercise, or trying a homework they had never tried before. What had stopped them from trying it in the first place? Why did they choose this exercise to re-try?

Discussion: Progress and setbacks
The therapist will open a discussion with the couple about their perceived progress during therapy. What changes have they noticed? How do they feel now having gone through therapy? The therapist will also explore setbacks or negative perceptions that may have developed during therapy. What challenges or problems did they encounter? What might be some ways of overcoming these barriers in the future (e.g., barriers to trying new exercises)?

Discussion: Summarizing information learned
The therapist will review what has been learned with the couple. What is the most significant thing they have learned? What aspects of therapy have been integrated into their daily life as a couple? What take-away messages are they leaving with for their sex-life? What components, exercises or information do they plan to continue integrating? What will they do in the future if they experience a period of increased pain, a flare-up? The therapist will also ask some of the following questions: How can they ensure they will keep practicing or implementing what they have learned? What problems do they anticipate? What might help prevent these problems?

Psychoeducation and discussion: Tools for the future
The therapist will discuss how to communicate with doctors and therapists in the future. Women with PVD and their partners often report frustration with doctors for many reasons, including: not feeling understood or listened to respectfully by physicians, feeling as though they are not taken seriously, and their experience that many physicians lack expertise and knowledge regarding PVD (Connor et al., 2008). As part of this discussion, the therapist will encourage women and their partners to be their own advocates when navigating the health care system, and to engage in self-assertion.

Tools for the future: 1) The therapist will give clients brochures from the National Vulvodynia Association. 2) The therapist will suggest the following books: 1) Lonnie Barbach, "For yourself: The fulfillment of female sexuality", 2) Lonnie Barbach, "For each other: Sharing sexual intimacy", 3) Margaret Caudill, "Managing pain before it manages you", 4) Elizabeth Stewart & Paula Spencer, "The V Book", 5) Goldstein, Pukall & Goldstein, "When sex hurts: A woman's guide to banishing sexual pain", 6) Emily Nagoski, "Come as you are: The surprising new science that will transform your sex life", 7) Lori A. Brotto, "Better sex through mindfulness: How women can cultivate desire", 8) Bernie Zilbergeld, "The new male sexuality – Revised edition", and any other book on sexuality that seems serious and instructive.

Considerations for therapy termination

Saying good-bye to clients is often a challenging part of therapy. During this last session, the therapist can share impressions of the couple's strengths for the future, alongside the couple outlining the tools they feel they have developed. The therapist can also express an authentic appreciation in having gotten to know them, and work with them.

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