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Dyspareunia in women : a painful affair : the role of fear of pain and sexual arousal

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R E F E R E N C E S

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (Fourth ed., text rev.). Washington, DC: Author.
- Arntz, A., & Claassens, L. (2003). The meaning of pain influences its experienced intensity. *Pain*, 109, 20-25
- Arntz A., Dreessen, L., & de Jong, P. (1994). The influence of anxiety on pain: attentional and attributional mediators. *Pain*, 56, 307-314.
- Arntz, A., Dreessen, L., & Merkelbach, H. (1991). Attention, not anxiety, influences pain. *Behaviour Research and Therapy*, 29, 41-50.
- Arrindell, W. A., Boelens, W., & Lambert, H. (1983). On the psychometric properties of the Maudsley Marital Questionnaire (MMQ): Evaluation of self-ratings in distressed and "normal" volunteer couples based on the Dutch version. *Personality and Individual Differences*, 4, 293-306.
- Arrindell, W. A., & Ettema, H. (1981). Dimensionele structuur, betrouwbaarheid en validiteit van de Nederlandse bewerking van de Symptom Check List (SCL-90): Gegevens gebaseerd op een fobische en een "normale" populatie. [Dimensional structure, reliability and validity of the Dutch adaptation of the Symptom Checklist (SCL-90): Data from a phobic and a "normal" population.] *Nederlands Tijdschrift voor de Psychologie*, 36, 77-108.
- Arrindell, W. A., & Ettema, H. (1986). Handleiding bij een multidimensionale psychopathology indicator. [Manual for Multi-dimensional Psychopathology Indicator.] Lisse: Swets & Zeitlinger.
- Bachmann, G. A., Leiblum, S. R., & Grill, J. (1989). Brief sexual inquiry in gynaecological practice. *Obstetrics and Gynaecology*, 73, 425-427.
- Bancroft, J. (1989). *Human sexuality and its problems*. Edinburgh, Scotland: Churchill Livingstone.
- Barlow, D. H. (1986). The causes of sexual dysfunction; the role of anxiety and cognitive interference. *Journal of Consulting and Clinical Psychology*, 54, 140-148.
- Basson, R. (2002). A model of women's sexual arousal. *Journal of Sex & Marital Therapy*, 28, 1-10.
- Basson, R., Berman, J., Burnett, A., Derogatis, L., Ferguson, D., Fourcroy, J., et al. (2003). Report of the international consensus development conference on female sexual dysfunction: Definitions and classification. *Journal of Urology*, 163, 888-893.
- Basson, R., & Weijmar Schultz, W. (2007). Sexual sequelae of general medical disorders. *Lancet*, 369, 409-424.
- Beck, A. T. (1976). *Cognitive theory and the emotional disorders*. New York: International Universities Press.
- 154 Beck, A. T., & Clark, D. A. (1997). An information processing model of anxiety: Automatic and strategic processes. *Behaviour Research and Therapy*, 35, 49-58.
- Beck, A. T., Emery, G., & Greenberg, R. L. (1985). *Anxiety disorders and phobias. A cognitive perspective*. New York: Basic Books.

- Beck, A. T., Steer, R. A., & Brown (1996). Beck Depression Index-II. San Antonio, TX: Harcourt, Brace and Company.
- Beck, J. G., & Baldwin, L. E. (1994). Instructional control of female sexual responding. *Archives of Sexual Behavior*, 23, 665-684.
- Beggs, V. E., Calhoun, K. S., & Wolchik, S. A. (1987). Sexual anxiety and female sexual arousal: A comparison of arousal during sexual anxiety stimuli and sexual pleasure stimuli. *Archives of Sexual Behavior*, 16, 311-319.
- Bergeron, S., Binik, Y., Khalifé, S., & Pagidas, K. (1997). Vulvar vestibulitis syndrome: A critical review. *Clinical Journal of Pain*, 13, 27-42.
- Bergeron S, Binik Y. M., Khalifé, S., Pagidas, K., & Glazer, H. I. (2001a). Vulvar vestibulitis syndrome: reliability of diagnosis and evaluation of current diagnostic criteria. *Obstetrics & Gynecology*, 98, 45-51.
- Bergeron, S., Binik, Y. M., Khalifé, S., Pagidas, K., Glazer, H. I., Meana, M., et al. (2001b). A randomized comparison of group cognitive-behavioral therapy, surface electromyographic biofeedback, and vestibulectomy in the treatment of dyspareunia resulting from vulvar vestibulitis. *Pain*, 91, 297-306.
- Bergeron, S., Khalifé, S., Glazer, H. I., & Binik, Y. M. (2008). Surgical and behavioral treatments for vestibulodynia: two-and-one-half-year follow-up and predictors of outcome. *Obstetrics & Gynecology*, 111, 159-166.
- Bergeron, S., & Lord, M. (2003). The integration of pelvi-perineal re-education and cognitive-behavioural therapy in the multidisciplinary treatment of the sexual pain disorders. *Sexual and Relationship Therapy*, 18, 135-140.
- Binik, Y. M. (2005). Should dyspareunia be retained as a sexual dysfunction in DSM-V? A painful classification decision. *Archives of Sexual Behavior*, 34, 11-21.
- Binik, Y. M., Bergeron, S., & Khalife, S. (2000). Dyspareunia. In S. R. Leiblum & R. C. Rosen (Eds.). *Principles and practices of sex therapy* (pp.154-180). New York: Guilford Press.
- Binik, Y. M., Meana, M., Berkely, K., & Khalifé, S. (1999). Dyspareunia: Is the pain sexual or is the sex painful? *Annual Review of Sex Research*, 10, 210-235.
- Bornstein, J., Livnat, G., Stolar, Z., & Abramovici, H. (2000). Pure versus complicated vulvar vestibulitis: a randomized trial of fluconazole treatment. *Gynecologic and Obstetric Investigation*, 50, 194-197.
- Bosson, J. K., Swann, W. B., & Pennebaker, J. (2000). Stalking the perfect measures of implicit self-esteem: the blind man and the elephant revisited? *Journal of Personality and Social Psychology*, 79, 631-643.
- Both S., Everaerd, W., & Laan, E. (2003). Modulation of spinal reflexes by aversive and sexually

- appetitive stimuli. *Psychophysiology*, 40, 174-183.
- Both, S., & Laan, E. (2007). Simultaneous measurement of pelvic floor muscle activity and vaginal blood flow: a pilot study. *Journal of Sexual Medicine*, 4, 690-701.
- Brotto, L. A., Basson, R., & Gorzalka, B. B. (2004). Psychophysiological assessment in premenopausal arousal disorder. *Journal of Sexual Medicine*, 1, 266-277.
- Cacioppo, J. T. et al. (2000). The psychophysiology of emotion. In Lewis, R. & Haviland-Jones, J. M. (Eds.). *Handbook of Emotion* (pp. 173-191). New York: Guilford Press.
- Catania, J. A., Gibson, D R., Chitwood, D. D., & Coates, T. J. (1990). Methodological problems in AIDS behavioral research: Influences on measurement error and participation bias in studies of sexual behavior. *Psychological Bulletin*, 108, 339-362.
- Cattell, R. B. (1966). The scree test for the number of factors. *Multivariate Behavioral Research*, 1, 245-276.
- Chivers, M. L. & Bailey, J. M. (2005). A sex difference in features that elicit genital response. *Biological Psychology*, 70, 115-120.
- Chivers, M. L., Seto, M. C., Lalumière, M. L., Laan, E., & Grimbos, T. (2008). Agreement of self-reported and genital measures of sexual arousal among men and women: A meta-analysis. Submitted for publication.
- Cohen J. (1988). *Statistical power analysis for the behavioral sciences*. (Second ed.). New Jersey: Lawrence Erlbaum Associates.
- Crombez, G., Eccleston, C., Baeyens, F., & Eelen, P (1998a). Attentional disruption is enhanced by the threat of pain. *Behaviour Research & Therapy*, 36, 195-204.
- Crombez, G., Eccleston, C., Baeyens, F., & Eelen, P (1998b). When somatic information threatens, pain catastrophizing enhances attentional interference. *Pain*, 75, 187-198.
- Crombez, G., Eccleston, C., Van den Broeck, A., Van Houdenhove, B., & Goubert, L. (2002). The effects of catastrophic thinking about pain upon attentional interference by pain: no mediation of negative affectivity in healthy volunteers and in low back pain patients. *Pain Research and Management*, 7, 31-39.
- Crombez, G., Van Damme, S., Eccleston, C. (2005). Hypervigilance to pain: an experimental and clinical analysis. *Pain*, 116, 4-7.
- Crowe, M. J. (1978). Conjoint marital-therapy-controlled outcome study. *Psychological Medicine*, 8, 623-636.
- 156 Danielsson, I., Eisemann, M., Sjöberg, I., & Wikman, M. (2001). Vulvar vestibulitis: a multi-factorial condition. *BJOG: An International Journal of Obstetrics and Gynaecology* 108, 456-461.
- Danielsson, I., Sjöberg, I., & Wikman, M. (2000). Vulvar vestibulitis: medical, psychosexual and psychosocial aspects, a case-control study. *Acta Obstetrica et Gynecologica Scandinavica*, 79,

872-878.

- Danielsson, I., Torstensson, T., Brodda-Jansen, G., & Bohm-Starke, N. (2006). EMG biofeedback versus topical lidocaine gel: a randomized study for the treatment of women with vulvar vestibulitis. *Acta Obstetrica et Gynecologica Scandinavica*, 85, 1360 - 1367.
- Derogatis, L. R., & Cleary, P. A. (1977). Factorial invariance across gender for primary symptom dimension of SCL-90. *British Journal of Social and Clinical Psychology*, 16, 347-356.
- Derogatis, L. R., Rosen, R., Leiblum, S., Burnett, A., & Heiman, J. (2002). The Female Sexual Distress Scale (FSDS) : Initial validation of a standardized scale for assessment of sexually related personal distress in women. *Journal of Sex and Marital Therapy*, 28, 317-330.
- de Gier, M., Vlaeyen, J. W. S., van Breukelen, G., Stomp, S. G. M., ter Kuile, M. M., Kole-Snijders, A. M. J., et al. (2004). Pijn Coping en Cognitie Lijst: Validering en normgegevens.[Pain Coping and Cognition List: Validity and normative data] Meetinstrumenten chronische pijn: deel 2 Pijn Coping en Cognitie Lijst (PCCL). Maastricht Pijn Kennis Centrum.
- De Houwer, J. (2003). The Extrinsic Affective Simon task. *Experimental Psychology*, 50, 77-85.
- De Houwer, J., Crombez, G., Baeyens, F., & Hermans, D. (2001). On the generality of the affective Simon effect. *Cognition and Emotion*, 15, 189-206.
- De Houwer, J., & Eelen, P. (1998). An affective variant of the Simon paradigm. *Cognition and Emotion*, 12, 45-61.
- De Houwer, J., & Hermans, D. (1994). Differences in affective processing of words and pictures. *Cognition and Emotion*, 8, 1-20.
- de Jong, J. M., van Lunsen, R. H. W., Robertson, E. A. Stam, L. N. E., & Lammes, F. B. (1995). Focal vulvitis: a psychosexual problem for which surgery is not the answer. *Journal of Psychosomatic Obstetrics and Gynaecology*, 16, 85-91.
- de Jong, P. J. (2000). Affective Simon effects: Potential confounding effects of phonological characteristics of required response. Unpublished manuscript. Department of Experimental Abnormal Psychology, Maastricht University, the Netherlands.
- de Jong, P. J. (2002). Implicit self-esteem and social anxiety: Differential self-favouring effects in high and low anxious individuals. *Behavior Research and Therapy*, 40, 501-508.
- de Jong, P. J., van den Hout, M. A., Rietbroek, H., & Huijding, J. (2003). Dissociations between implicit and explicit attitudes towards phobic stimuli. *Cognition and Emotion*, 17, 521-545.
- de Kruiff, M. E., ter Kuile, M. M., Weijnenborg, P. T. M., & van Lankveld, J. J. D. M. (2000). Vaginismus and dyspareunia: Is there a difference in clinical presentation? *Journal of Psychosomatic Obstetrics and Gynaecology*, 21, 149-155.
- De Raedt, R., Schacht, R., Franck, E., & De Houwer, J. (2006). Self-esteem and depression revisited: Implicit positive self-esteem in depressed patients? *Behav. Res. and Ther.*, 44, 1017-1028.

- Eccleston, C., & Crombez, G. (1999). Pain demands attention: A cognitive-affective model on the interruptive function of pain. *Psychological Bulletin*, 125, 356-366.
- Edwards, L. (2004). Subsets of vulvodynia- overlapping characteristics. *Journal of Reproductive Medicine*, 49, 883-887.
- Egloff, B., & Schmukle, S. C. (2002). Predictive validity of an implicit association test for assessing anxiety. *Journal of Personality and Social Psychology*, 83, 1441-1455.
- Elliott, A. N., & O'Donohue, W. T. (1997). The effects of anxiety and distraction on sexual arousal in a nonclinical sample of heterosexual women. *Archives of Sexual Behavior*, 26, 607-624.
- Everaerd, W., Both, S., & Laan, E. (2006). The experience of sexual emotions. *Annual Review of Sex Research*, 17, 183-199.
- Everaerd, W., Laan, E., Both, S., & van der Velde, J. (2000). Female sexuality. In L. Szuchman & F. Muscarella (Eds.), *Psychological perspectives on human sexuality* (pp. 60-100). New York: Wiley.
- Farage, M. A., & Galask, R. P. (2005). Vulvar vestibulitis syndrome: a review. *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 123, 9-16.
- Fazio, R. H., & Olson, M. A. (2003). Implicit measures in social cognition research: Their meaning and use. *Annual Review of Psychology*, 54, 297-327.
- Fazio, R. H., & Towles-Schwen, T. (1999). The MODE model of behaviour-attitude processes. In S. Chaiken, & Y. Trope (Eds.), *Dual process theories in social psychology* (pp. 97-116). New York: Guilford.
- First, M. B., Spitzer, R. L., Gibbon, M., & Williams, J. B. (1997). *Structured Clinical Interview for DSM-IV Axis I Disorders-Clinical Version SCID-CV*. Washington, DC: American Psychiatric Press.
- Fisher, W. A., Byrne, D., White, L. A., & Kelley, K. (1988). Erotophobia-erotophilia as a dimension of personality. *Journal of Sex Research*, 25, 123-151.
- Friedrich, E. G. (1987). Vulvar vestibulitis syndrome. *Journal of Reproductive Medicine*, 32, 110-114.
- Gates, E. A., & Galask, R. P. (2001) Psychological and sexual functioning in women with vulvar vestibulitis syndrome. *Journal of Psychosomatic Obstetrics and Gynaecology*, 22, 221-228.
- Glazer, H. I., Jantos, M., Hartmann, E. H., & Swencionis, C. (1998). Electromyographic comparison of the pelvic floor in women with dysesthetic vulvodynia and asymptomatic women. *Journal of Reproductive Medicine*, 43, 959-962.
- Goetsch, M. F. (1991). Vulvar vestibulitis: Prevalence and historic features in a general gynecologic practice population. *American Journal of Obstetrics and Gynecology*, 164, 1609-1616.
- Goubert, L., Crombez, G., & Van Damme, S. (2004). The role of neuroticism, pain catastrophizing and pain-related fear in vigilance to pain: a structural equations approach. *Pain*, 107, 234-241.
- Granot, M. (2005). Personality traits associated with perception of noxious stimuli in women with vulvar vestibulitis syndrome. *The Journal of Pain*, 6, 168-173.

- Granot, M., Friedman, M., Yarnitsky, D., & Zimmer, E. Z. (2002). Enhancement of the perception of systemic pain in women with vulvar vestibulitis. *British Journal of Gynaecology*, 109, 863-866.
- Granot, M., & Lavee, Y. (2005). Psychological factors associated with perception of experimental pain in vulvar vestibulitis syndrome. *Journal of Sex & Marital Therapy*, 31, 285-302.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition. The implicit association test. *Journal of Personality and Social Psychology*, 85, 197-216.
- Haefner, H. K. (2007). Report of the International Society for the Study of Vulvovaginal Disease Terminology and Classification of Vulvodynia. *Journal of Lower Genital Tract Disease*, 11, 48-49.
- Harlow, B. L., Wise, L. A., & Stewart, E. G. (2001). Prevalence and predictors of chronic lower tract discomfort. *American Journal of Obstetrics and Gynecology*, 185, 545-550.
- Heiman, J. R., & Rowland, D. L. (1983). Affective and physiological sexual response patterns: The effect of instructions on sexually functional and dysfunctional men. *Journal of Psychosomatic Research*, 27, 105-116.
- Hoon, E. F., & Chambless, D. (1998). Sexual Arousal Inventory and Sexual Arousal Inventory-Expanded. In C. Davis, W. Yarber, R. Bauserman, R. Schreer, & S. Davis (Eds.), *Handbook of sexuality-related measures* (pp. 71-74). Thousand Oaks, CA: Sage.
- Hoon, E. F., Hoon, P. W., & Wincze, J. P. (1976). An inventory for the measurement of female sexual arousal. *Archives of Sexual Behavior*, 5, 291-300.
- Hoon, P. W., Wincze, J. P., & Hoon, E. F. (1977). A test of reciprocal inhibition: are anxiety and sexual arousal in women mutually inhibitory? *Journal of Abnormal Psychology*, 1, 65-74.
- Huijding, J., & de Jong, P. J. (2005). A pictorial version of the Extrinsic Affective Simon Task: Sensitivity to generally affective and phobia-relevant stimuli in high and low spider fearful individuals. *Experimental Psychology*, 52, 289-295.
- Huijding, J., & de Jong, P. J. (in press). Implicit and explicit attitudes toward spiders: Sensitivity to treatment and predictive value for generalization of treatment effects. *Cognitive Therapy and Research*.
- Huijding, J., & de Jong, P. J., (2006). Specific predictive power of automatic spider-related affective associations for controllable and uncontrollable fear responses toward spiders. *Behaviour Research and Therapy*, 44, 161-176.
- Huijding, J., de Jong, P. J., Wiers, R., & Verkoijen, K. (2005). Implicit and explicit attitudes toward smoking in a smoking and a nonsmoking setting. *Addictive Behaviors*, 30, 949-961.
- Janssen, E., Everaerd, W., Spiering, M., & Janssen, J. (2000). Automatic processes and the appraisal of sexual stimuli: Toward an information processing model of sexual arousal. *Journal of Sex Research*, 37, 8-23.

- Janssen, S. A., & Arntz, A. (1997). No evidence for opioid-mediated analgesia induced by phobic fear. *Behaviour Research & Therapy*, 35, 823-830.
- Janssen, S. A., Arntz, A., & Bouts, S. (1998). Anxiety and pain: epinephrine-induced hyperalgesia and attentional influences. *Pain*, 76, 309-316.
- Janssen, S. A., Spinhoven, P., & Arntz, A. (2004). The effects of failing to control pain: an experimental investigation. *Pain*, 107, 227-233.
- Kaplan, H. S. (1974). *The new sex therapy: Active treatment of sexual dysfunctions*. New York: Brunner/Mazel.
- Kedde, H. (2007). *LOPS-registratie 2005*. Utrecht: Landelijk Overleg van Poliklinieken Seksuologie/Rutgers Nisso Groep.
- Kooiman, C. G., Ouweland, A. W., & Kuile, M. M., ter (2002). The Sexual and Physical Abuse Questionnaire (SPAQ). A screening instrument for adults to assess past and current experiences of abuse. *Child Abuse and Neglect*, 26, 939-953.
- Kuffel, S. W., & Heiman, J. R. (2006). Effects of depressive symptoms and experimentally adopted schemas on sexual arousal and affect in sexually healthy women. *Archives of Sexual Behavior*, 35, 160-174.
- Laan, E., & Everaerd, W. (1995). Determinants of female sexual arousal: Psychophysiological theory and data. *Annual Review of Sex Research*, 6, 32-76.
- Laan, E., Everaerd, W., & Both, S. (2005). Female sexual arousal disorders. In R. Balon & R. T. Segraves (Eds.), *Handbook of Sexual Dysfunctions* (pp. 123-154). New York: Marcel Dekker Inc.
- Laan, E., Everaerd, W., & Evers, A. (1995). Assessment of female sexual arousal: Response specificity and construct validity. *Psychophysiology*, 32, 476-85.
- Laan, E., Everaerd, W., van Aanhoud, & Rebel, M. (1993). Performance demand and sexual arousal in women. *Behaviour Research and Therapy*, 31, 25-35.
- Laan, E., Everaerd, W., van Bellen, G., & Hanewald, G. (1994). Women's sexual and emotional responses to male- and female-produced erotica. *Archives of Sexual Behavior*, 23, 153-170.
- Laan, E., Everaerd, W., van der Velde, J., & Geer, J. H. (1995). Determinants of subjective experience of sexual arousal in women: Feedback from genital arousal and erotic stimulus content. *Psychophysiology*, 32, 444-451.
- Laan, E., & Janssen, E. (2007). How do men and women feel? Determinants of subjective experience of sexual arousal. In E. Janssen (Ed.), *The psychophysiology of sex* (pp. 278-290). Bloomington, IN: Indiana University Press.
- Laan, E., van Driel, E., & van Lunsen, R. (2003). Seksuele reacties van vrouwen met een seksuele opwindingsstoornis op visuele seksuele stimuli. *Tijdschrift voor Seksuologie*, 27, 1-13.
- Laan, E., van Driel, E. M., & van Lunsen, R. H. W. (in press). Genital responsiveness in healthy women

- with and without sexual arousal disorder. *Journal of Sexual Medicine*.
- Lamm, C., Batson, C. D., Decety, J. (2007). The Neural Substrate of Human Empathy: Effects of Perspective-taking and Cognitive Appraisal. *Journal of Cognitive Neuroscience*, 19, 42-58.
- Lang, P. J., Bradley, M. M., & Cuthbert, B. N. (1990). Emotion, attention, and the startle reflex. *Psychological Review*, 97, 377-395.
- Lang, P. J., Bradley, M. M., & Cuthbert, B. N. (2005). International affective picture system (IAPS): Affective ratings of pictures and instruction manual. Technical Report A-6. University of Florida, Gainesville, FL.
- Lecrubier, Y., Sheehan, D. V., Weiller, E., Amorim, P., Bonora, I., Sheehan, K. H., et al. (1997). The Mini International Neuropsychiatric Interview (MINI). A short diagnostic structured interview: Reliability and validity according to the CIDI. *European Psychiatry*, 12, 224-231.
- LeDoux, J. E. (1995). Emotion: Clues from the brain. *Annual Review of Psychology*, 46, 209-235.
- Leeuw, L., Goossens, M. E. J. B., Linton, S. J., Crombez, G., Boersma, K., & Vlaeyen, J. W. S. (2007). The Fear-Avoidance Model of Musculoskeletal Pain: Current State of Scientific Evidence. *Journal of Behavioral Medicine*, 30, 77-94.
- Levin, R. J. (1992). The mechanisms of human female sexual arousal. *Annual Review of Sex Research*, 3, 1-48.
- Levin, R. J. (1999). Measuring the menopausal changes—a critical account of laboratory procedures past and for the future. *Menopause Review*, 4, 49-57.
- Levin, R. J. (2003). A journey through two lumens! *International Journal of Impotence Research*, 15, 2-9.
- Lotery, H. E., McClure, N., & Galask, R. P. (2004). Vulvodynia. *Lancet*, 363, 1058-60.
- Masheb, R. M., Lozano-Blanco, C., Kohorn, E. I., Minkin, M. J., & Kerns, R. D. (2004). Assessing sexual function and dyspareunia with the Female Sexual Function Index (FSFI) in women with vulvodynia. *Journal of Sex & Marital Therapy*, 30, 315-324.
- Masters, W. H., & Johnson, V. E. (1966). *Human sexual response*. Boston: Little, Brown.
- Masters, W. H., & Johnson, V. E. (1970). *Human sexual inadequacy*. Boston: Little, Brown.
- McCracken, L. M., Gross, R. T., Aikens, J., & Carnrike, C. L. M. (1996). The assessment of anxiety and fear in persons with chronic pain: A comparison of instruments. *Behaviour Research and Therapy*, 34, 927-933.
- Meana, M., & Binik, Y. (1994). Painful coitus: A review of female dyspareunia. *Journal of Nervous and Mental Disease*, 182, 264-272.
- Meana, M., Binik, Y.M., Khalifé, S., & Cohen, D. (1997). Biopsychological profile of women with dyspareunia. *Obstetrics and Gynecology*, 90, 583-589.
- Meston, C. M. (2006). The effects of state and trait self-focused attention on sexual arousal in sexually functional and dysfunctional women. *Behaviour Research and Therapy*, 44, 515-532.

- Meston, C. M., & Gorzalka, B. B. (1996). Differential effects of sympathetic activation on sexual arousal in sexually dysfunctional women. *Journal of Abnormal Psychology, 105*, 582-591.
- Middleton, L. S., Kuffel, S. W., & Heiman, J. R. (in press). Effects of experimentally adopted sexual schemas on vaginal response and subjective sexual arousal: A comparison between women with sexual arousal disorder and sexually healthy women. *Archives of Sexual Behavior*.
- Moors, A. & De Houwer, J. (2006). Automaticity: A theoretical and conceptual analysis. *Psychological Bulletin, 132*, 297-326.
- Morokoff, P., & Heiman, J. (1980). Effects of erotic stimuli on sexually functional and dysfunctional women: Multiple measures before and after sex therapy. *Behaviour Research and Therapy, 18*, 127-137.
- Moseley, G. L., & Arntz, A. (2007). The context of a noxious stimulus affects the pain it evokes. *Pain, 133*, 64-71.
- Nunnally, J. C. (1967). *Psychometric theory*. (Second ed.). New York: Mc Graw Hill.
- Nunns, D., & Mandal, D. (1997). Psychological and psychosexual aspects of vulvar vestibulitis. *Genitourinary Medicine, 73*, 541-544.
- Nyirjesy, P., Sobel, J. D., Weitz, M. V., Leaman, D. J., Small, M. J., & Gelone, S. P. (2001). Cromolyn cream for recalcitrant idiopathic vulvar vestibulitis: results of a placebo controlled study. *Sexually Transmitted Infections, 7*, 53-57.
- Nylanderlundqvist, E., & Bergdahl, J. (2003). Vulvar vestibulitis: Evidence of depression and state anxiety in patients and partners. *Acta Dermato-Venereologica, 83*, 369-373.
- Ochsner, K. N., & Gross, J. J. (2005). The cognitive control of emotion. *Trends in Cognitive Sciences, 9*, 242-249.
- Ohman, A. (1993). Fear and anxiety as emotional phenomena. Clinical phenomenology, evolutionary perspectives, and information processing mechanisms. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (pp. 511-526). New York: Guilford Press.
- Okifuji, A., Turk, D. C., & Marcus, D. A. (1999). Comparison of generalized and localized hyperalgesia in patients with recurrent headache and fibromyalgia. *Psychosomatic Medicine, 61*, 771-780.
- Palace, E. M., & Gorzalka, B. B. (1990). The enhancing effects of anxiety on arousal in sexually dysfunctional and functional women. *Journal of Abnormal Psychology, 4*, 403-411.
- Payne, K. A., Binik, Y. M., Amsel, R., & Khalifé, S. (2005). When sex hurts, anxiety and fear orient attention towards pain. *European Journal of Pain, 9*, 427-436.
- Payne, K.A., Binik, Y.M., Pukall, C. F., Thaler, L., Amsel, R., & Khalifé, S. (2007). Becoming sexually aroused is a sensitive issue: The influence of sexual arousal on genital and non-genital sensation in women. *Archives of Sexual Behavior, 36*, 289-300.
- Peters, M., Vlaeyen, J. W. S., & Weber, W. E. J. (2005). The joint contribution of physical pathology,

- pain-related fear and catastrophizing to chronic back pain disability. *Pain*, 113, 45-50.
- Peterson, Z. D., & Janssen, E. (2007). Ambivalent affect and sexual response: the impact of co-occurring positive and negative emotions on subjective and physiological sexual responses to erotic stimuli. *Archives of Sexual Behavior*, 36, 793-807.
- Pratto, F., & John, O. P. (1991). Automatic vigilance: The attention grabbing power of negative social information. *Journal of Personality and Social Psychology*, 61, 380-391.
- Pukall, C. F., Binik, Y. M., Khalifé, S., Amsel, R., & Abbott, F. V. (2002). Vestibular tactile and pain thresholds in women with vulvar vestibulitis syndrome. *Pain*, 96, 163-175.
- Rachman, S. (1998). *Anxiety*. Psychological Press, Hove.
- Reissing, E. D., Binik, Y. M., Khalifé, S., Cohen, D., & Amsel, R. (2003). Etiological correlates of vaginismus: Sexual and physical abuse, sexual knowledge, sexual self-schema, and relationship adjustment. *Journal of Sex and Marital Therapy*, 29, 47-59.
- Reissing, E. D., Binik, Y. M., Khalifé, S., Cohen, D., & Amsel, R. (2004). Vaginal spasm, pain, and behavior: An empirical investigation of the diagnosis of vaginismus. *Archives of Sexual Behavior*, 33, 264-272.
- Reissing, E. D., Brown, C., Lord, M. J., Binik, Y. M., & Khalifé, S. (2005). Pelvic floor muscle functioning in women with vulvar vestibulitis syndrome. *Journal of Psychosomatic Obstetrics & Gynecology*, 26, 107-113.
- Rosen, R., Brown, C., Heiman, J., Leiblum, S., Meston, C., Shabsigh, R., et al. (2000). The Female Sexual Function Index (FSFI): A multidimensional self-report instrument for the assessment of female sexual function. *Journal of Sex and Marital Therapy*, 26, 191-208.
- Rothermund, K., & Wentura, D. (2004). Underlying processes in the Implicit Association Test: Dissociating salience from associations. *Journal of Experimental Psychology: General*, 133, 139-165.
- Rowland, D. L. (1999). Issues in the laboratory study of human sexual response: A synthesis for the nontechnical sexologist. *The Journal of Sex Research*, 36, 3-15.
- Rowland, D. L., Cooper, S. E., & Heiman, J.R. (1995). A preliminary investigation of affective and cognitive response to erotic stimulation in men before and after sex therapy. *Journal of Sex & Marital Therapy*, 21, 3-20.
- Royalle, C. (Producer). (2000). *One size fits all* [Motion Picture]. (Available from Private Benelux BV, Best).
- Salemink, E. & van Lankveld, J. J. D. M. (2006). The effects of increasing neutral distraction on sexual responding of women with and without sexual problems. *Archives of Sexual Behavior*, 35, 179-190.
- Sbrocco, T., & Barlow, D. H. (1996). Conceptualizing the cognitive component of sexual arousal: Implications for sexuality research and treatment. In P. M. Salkovskis (Ed.), *Frontiers of cognitive*

- therapy (pp 419-449). New York: Guilford Press.
- Schimmack, U. (2005). Attentional interference effects of emotional pictures: Threat, negativity, or arousal? *Emotion*, 5, 55-66.
- Segraves, R. T., & Segraves, K. G. (1991). Diagnosis of female arousal disorder. *Sexual and Marital Therapy*, 6, 9-13.
- Severeijns, R., Vlaeyen, J. W. S., van den Hout, M. A., & Weber, W. E. J. (2001). Pain catastrophizing predicts pain intensity, disability, and psychological distress independent of the level of physical impairment. *Clinical Journal of Pain*, 17, 165-172.
- Sheehan, D. V., Lecrubier, Y., Sheehan, K. H., Janavs, J., Weiller, E., Keskiner, A., et al. (1997). The validity of the Mini International Neuropsychiatric Interview (MINI) according to the SCID-P and its reliability. *European Psychiatry*, 12, 232-241.
- Simons, J. S., & Carey, M. P. (2001). Prevalence of sexual dysfunctions: Results from a decade of research. *Archives of Sexual Behavior*, 30, 177-219.
- Sintchak, G., & Geer, J. H. (1975). A vaginal photoplethysmograph system. *Psychophysiology*, 12, 113-115.
- Sipski, M. L., Rosen, R. C., Alexander, C. J., & Gomez-Marin, O. (2004). Sexual responsiveness in women with spinal cord injuries: Differential effects of anxiety-eliciting stimulation. *Archives of Sexual Behavior*, 33, 295-302.
- Spano, L., & Lamont, J. A. (1975). Dyspareunia: A symptom of female sexual dysfunction. *The Canadian Nurse*, 8, 22-25.
- Spielberger, C. D., Gorsuch, R., & Lushene, R. (1970). *The State-Trait Anxiety Inventory (STAI) Manual*. Palo Alto, CA: Consulting Psychologists Press.
- Spiering, M., Everaerd, W., Karsdorp, P., Both, S., & Brauer, M. (2006). Nonconscious processing of sexual information: A generalization to women. *Journal of Sex Research*, 43, 268-281.
- Spiering, M., Everaerd, W., & Laan, E. (2004). Conscious processing of sexual information: Mechanisms of appraisal. *Archives of Sexual Behavior*, 33, 369-380.
- Strack, F., & Deutch, R. (2004). Reflective and impulsive determinants of social behaviour. *Personality and Social Psychology Review*, 8, 220-247.
- Stomp-van den Berg, S. G. M., Vlaeyen, J. W. S., ter Kuile, M. M., Spinhoven, Ph., van Breukelen, G., & Kole-Snijders, A. M. J. (2001). Meetinstrumenten chronische pijn: deel 2 Pijn Coping en Cognitie Lijst (PCCL). Maastricht Pijn Kennis Centrum, 2001.
- 164 Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. (4th ed.). Allyn & Bacon.
- Teachman, B.A., Gregg, A.P., & Woody, S. R. (2001). Implicit associations for fear-relevant stimuli among individuals with snake and spider fears. *Journal of Abnormal Psychology*, 110, 226-235.
- ter Kuile, M. M., Bolle, G., & Weijnenborg, Ph. (2004). Seksuele disfuncties bij vrouwen. In L. Gijs, W.

- Gianotten, I. Vanwesenbeeck & Ph. Weijnenborg (Red.), *Seksuologie* (pp. 359-386). Houten: Bohn Stafleu Van Loghum.
- ter Kuile, M. M., Bulté, I., Weijnenborg, P. M. T., Beekman, A., Melles, R., & Onghena, P. (2008). Prolonged therapist-aided exposure for women with lifelong vaginismus: A replicated single case experimental design. Manuscript submitted for publication.
- ter Kuile, M. M., Brauer, M., & Laan (2006). The Female Sexual Function Index (FSFI) and the Female Sexual Distress Scale (FSDS): Psychometric properties within a Dutch population. *Journal of Sex and Marital Therapy*, 32, 289-304.
- ter Kuile, M. M., Vigeveno, D., & Laan, E. (2007). Preliminary evidence that acute and chronic daily psychological stress affect sexual arousal in sexually functional women. *Behaviour Research and Therapy*, 45, 2078-2089.
- ter Kuile, M. M., & Weijnenborg, P. T. M. (2006). A cognitive-behavioral group program for women with vulvar vestibulitis syndrome (VVS): Factors associated with treatment success. *Journal of Sex & Marital Therapy*, 32, 199-213.
- Vancleef, L. M. G., Peters, M. L., Gilissen, S. M. P., & de Jong, P. J. (2007). Understanding the role of injury/illness sensitivity and anxiety sensitivity in pain processing: An examination using the Extrinsic Affective Simon Task. *Journal of Pain*, 8, 563-572.
- Vlaeyen, J. W. S., & Linton, S. J. (2000) Fear-avoidance and its consequences in chronic musculoskeletal pain: a state of the art. *Pain*, 85, 317-332.
- Vasey, M. W., & Thayer, J. F. (1987). The continuing problem of false positives in repeated measures ANOVA in psychophysiology- a multivariate solution. *Psychophysiology*, 24, 479-86.
- Van Damme, S., Crombez, G., & Eccleston, C. (2004a). Disengagement from pain: the role of catastrophic thinking about pain. *Pain*, 107, 70-76.
- Van Damme, S., Crombez, G., Eccleston, C., & Goubert, L. (2004b). Impaired disengagement from threatening cues of impending pain in a crossmodal cueing paradigm. *European Journal of Pain*, 8, 227-236.
- van Lankveld, J. J. D. M., Weijnenborg, P. T. M., & ter Kuile, M. M. (1996). Psychologic profiles of and sexual function in women with vulvar vestibulitis and their partners. *Obstetrics and Gynecology*, 88, 65-69.
- van Lankveld, J. J. D. M., Brewaeyns, A. M. A., ter Kuile, M. M., & Weijnenborg, P. T. M. (1995). Difficulties in the differential diagnosis of vaginismus, dyspareunia, and mixed sexual pain disorder. *Journal of Psychosomatic Obstetrics and Gynecology*, 16, 201-209.
- van Lunsen, H.W., & Ramakers, M. (2002). The hyperactive pelvic floor syndrome (HPFS): Psychosomatic and psycho-sexual aspects of hyperactive pelvic floor disorders with comorbidity of urogynecological, gastrointestinal and sexual symptomatology. *Acta Endoscopica*, 32, 275-285.

- van den Hout, M., & Barlow, D. (2000). Attention, arousal, and expectancies in anxiety and sexual disorders. *Journal of Affective Disorders*, 61, 241-256.
- van der Does, A. W. J. (2002). Handleiding bij de Nederlandse bewerking Van de BDI - II [Manual of the Dutch version of the BDI - II]. San Antonio, Texas/Lisse, The Netherlands: The Psychological Corporation/Swets Test Publishers.
- van der Ploeg, H. M., Defares, H. B., & Spielberger, C. B. (1979). Handleiding bij de zelfbeoordelingsvragenlijst. Een Nederlandse bewerking van de Spielberger State-Trait Anxiety Inventory. [Validity of the Zelf-Beoordelings-Vragenlijst. A Dutch version of the Spielberger State-Trait Anxiety Inventory]. Lisse: Swets and Zeitlinger.
- van der Velde, J., & Everaerd, W. (2001). The relationship between involuntary pelvic floor muscle activity, muscle awareness, and experienced threat in women with and without vaginismus. *Behaviour Research and Therapy*, 39, 395-408.
- van der Velde, J., Laan, E., & Everaerd, W. (2001). Vaginismus, a component of a general defensive reaction. an investigation of pelvic floor muscle activity during exposure to emotion-inducing film excerpts in women with and without vaginismus. *International Urogynecology Journal and Pelvic Floor Dysfunction*, 12, 328-331.
- Weijmar Schultz, W., Basson, R., Binik, Y., Eschenbach, D., Wesselman, U., & van Lankveld, J. (2005). Women's sexual pain and its management. *Journal of Sexual Medicine*, 2, 301-316.
- White, G., & Jantos, M. (1998). Sexual behavior changes with vulvar vestibulitis syndrome. *Journal of Reproductive Medicine*, 43, 783-789.
- White, G., Jantos, M., & Glazer, H. (1997). Establishing the diagnosis of vulvar vestibulitis. *Journal of Reproductive Medicine*, 42, 157-160.
- Wiegel, M., Meston, C., & Rosen, R. (2005). The Female Sexual Function Index (FSFI): Cross-validation and development of clinical cutoff scores. *Journal of Sex and Marital Therapy*, 31, 1-20.
- Wilson, T. D., Lindsey, S., & Schooler, T. Y. (2000). A model of dual attitudes. *Psychological Review*, 107, 101-126.
- Wolchik, S. A., Spencer, S. L., & Jensen, K (1985). Volunteer bias in erotica research: Effects of intrusiveness of measure and sexual background. *Archives of Sexual Behavior*, 14, 93-107.
- Wouda, J. C., Hartman, P. M., Bakker, R. M., Bakker, J. O., van de Wiel, H. B. M., & Weijmar Schultz, W. C. M. (1998). Vaginal plethysmography in women with dyspareunia. *Journal of Sex Research*, 35, 141-147.
- 166 Wylie, K., Hallom-Jones, & Harrington, C. (2004). Psychological difficulties within a group of patients with vulvodynia. *Journal of Psychosomatic Obstetrics and Gynecology*, 25, 257-265.
- Zucker, K.J., Bradley, S.J., Oliver, G., Blake, J., Fleming, S., & Hood, J. (2004). Self-reported sexual arousability in women with congenital adrenal hyperplasia. *Journal of Sex and Marital Therapy*, 30, 343-355.