

International Journal of Sport Studies for Health

Journal Homepage



The Effectiveness of a Combined Pelvic Floor Exercise Program and Desensitization-Based Sex Therapy on Pain and Sexual Satisfaction in Female Athletes

Hanieh. FakhriehKashani¹, Nastaran. Madankan^{2*}, Elham. Dehghan³, Sosan. Mehryar⁴, Mahsa. Teimouri⁵, Mohammad Reza. Hajrezaei⁶

¹ Department of Psychology, SR.C, Islamic Azad University, Tehran, Iran

² Department of Psychology, Cha.C, Islamic Azad University, Chalus, Iran

³ Department of Clinical Psychology, Sha.C., Islamic Azad University, Shahrood, Iran

⁴ Department of Medicine, Nowshera Medical College, Khyber Medical University, Khyber Pakhtunkhwa, Pakistan

⁵ Department Psychology, Faculty of Humanities, Se.C., Islamic Azad University, Semnan, Iran



⁶ Department of Psychology, Shahed University, Tehran, Iran

* **Corresponding author email address:** nastaranmadankan@gmail.com

Editor

Morteza Taheri¹
Department of Sport Psychology,
Faculty of Sport Sciences and
Health; University of Tehran;
Tehran; Iran
Taheri.mortza@ut.ac.ir

Reviewers

Reviewer 1: Masoud Mirmoezi¹
Department of Physical Education and Sport Sciences, Islamic Azad University,
Central Tehran Branch, Tehran, Iran. Email: massoudmirmoezi@live.com
Reviewer 2: Hadi Nobari¹
LFE research group, Department of Health and Human Performance, Faculty of
Physical Activity and Sport Science (INEF), Universidad Politécnica de Madrid,
Madrid 28040, Spain, Tehran, Iran. Email: hadinobari1@unex.es

1. Round 1

1.1 Reviewer 1

Reviewer:

In the opening paragraph describing dyspareunia and Genito-pelvic pain/penetration disorders, the transition from general population data to athletic populations is abrupt. Consider adding a bridging sentence explicitly highlighting why athletic women may experience distinct pathophysiological or psychosocial risk profiles compared with non-athletes.

The statement “female athletes showing especially high prevalence and low rates of disclosure and specialized care seeking” is important but broad. Please clarify whether this refers primarily to elite athletes, recreational athletes, or both, and briefly indicate whether underreporting is driven more by stigma, lack of screening, or access barriers.

While PFMT is well justified, the sentence “PFMT protocols are heterogeneous across studies” could be strengthened by briefly specifying which dimensions vary most (e.g., dosage, supervision, biofeedback use, relaxation vs strengthening emphasis). This would further justify the need for a standardized combined protocol.

The manuscript acknowledges moderate inter-rater reliability of MOS. Please report whether inter-rater reliability was formally assessed in the current study (e.g., ICC values from calibration sessions), or clarify that this was not measured.

Table 1 is detailed and valuable; however, Session 4 introduces dilators while earlier sessions emphasize relaxation and awareness. Please justify the timing of introducing graded penetration exposure and explain whether progression criteria were standardized or therapist-judgment based.

Author revised the manuscript and uploaded the updated document.

1.2 Reviewer 2

Reviewer:

In the discussion of desensitization-based sex therapy, the manuscript cites variability in trial quality but does not clearly articulate how the present study addresses those limitations. Please explicitly state how your intervention design improves upon prior trials (e.g., manualization, therapist training, integration with PFMT).

The metaphor contrasting “hardware” and “software” mechanisms is conceptually appealing but informal. Consider rephrasing this section using more technical language (e.g., peripheral neuromuscular mechanisms vs central cognitive-affective processes) to maintain academic tone.

The hypothesis paragraph introduces mediation by pelvic-floor coordination and fear-avoidance. However, these mediators are not framed as pre-specified or exploratory. Please clarify whether mediation analyses were confirmatory (a priori) or exploratory, and whether they were powered accordingly.

In the inclusion criterion “persistent penetration-related pain ... and/or low sexual satisfaction,” the use of “and/or” introduces heterogeneity. Please clarify whether participants could qualify with low satisfaction alone (without pain), and if so, whether subgroup analyses were considered.

While the VAS-based calculation is clearly presented, the statement “This sample size provides adequate power for the co-primary outcome of sexual satisfaction” would benefit from empirical justification. Please indicate whether FSFI variance estimates were drawn from prior studies or pilot data.

The FSFI is used both as a total score and via the satisfaction domain. Please justify analytically whether the satisfaction domain was treated as a co-primary outcome or secondary outcome, and how multiplicity was addressed in hypothesis testing.

Author revised the manuscript and uploaded the updated document.

2. Revised

Editor’s decision after revisions: Accepted.

Editor in Chief’s decision: Accepted.