

The Differential Impact of Sexual Dysfunction on HRQoL in Men and Women With MS



Shaina Shagalow¹, Caroline Altaras¹, Jenna Cohen¹, Amanda Najjar¹, Shonna Schneider¹, Nicholas Vissiccho¹, Amanda Parker¹, Frederick W. Foley^{1,2}

¹Ferkauf Graduate School of Psychology, Yeshiva University, Bronx, NY; ²Holy Name Medical Center, MS Center, Teaneck, NJ

Abstract

Objectives: Use the Multiple Sclerosis Intimacy and Sexuality Questionnaire-15 (MSISQ-15) to examine whether gender moderates the impact of PSD, SSD, TSD on physical and mental health-related quality of life (HRQoL).

Methods: The sample included 5,667 participants from the North American Research Committee on Multiple Sclerosis (NARCOMS) Registry. Self-report data from the MSISQ-15, the mental and physical subscales of the self-report SF-12 Health Survey (MCS-12 and PCS-12), and the Patient Determined Disease Steps (PDDS) were examined using hierarchical linear regressions.

Results: PSD, SSD, and TSD predicted both PCS-12 and MCS-12. Gender moderated the effect of PSD, SSD, and TSD on PCS-12. Gender did not moderate the relationship between the MCS-12 on PSD, SSD, TSD.

Conclusions: Gender moderated the relationship between PSD, SSD, TSD and PCS-12. Gender did not moderate the relationship between the MCS-12 on PSD, SSD, TSD.

Background

Sexual dysfunction (SD) impacts an estimated 73% of the MS population.¹ SD in MS is categorized by primary, secondary, and tertiary sexual dysfunctions (PSD, SSD, PSD).² PSD refers to neurological changes with direct effects on sexual functioning; SSD involves physical, MS-related changes indirectly related to sexual response; and TSD involves psychosocial issues associated with disability that affect sexual satisfaction.² Research suggests that SD is strongly related to perception of both physical and mental HRQoL in MS.³ Exploring how gender differences moderate the impact of PSD, SSD, and TSD on HRQoL may increase our understanding and treatment of SD in MS.

Methods

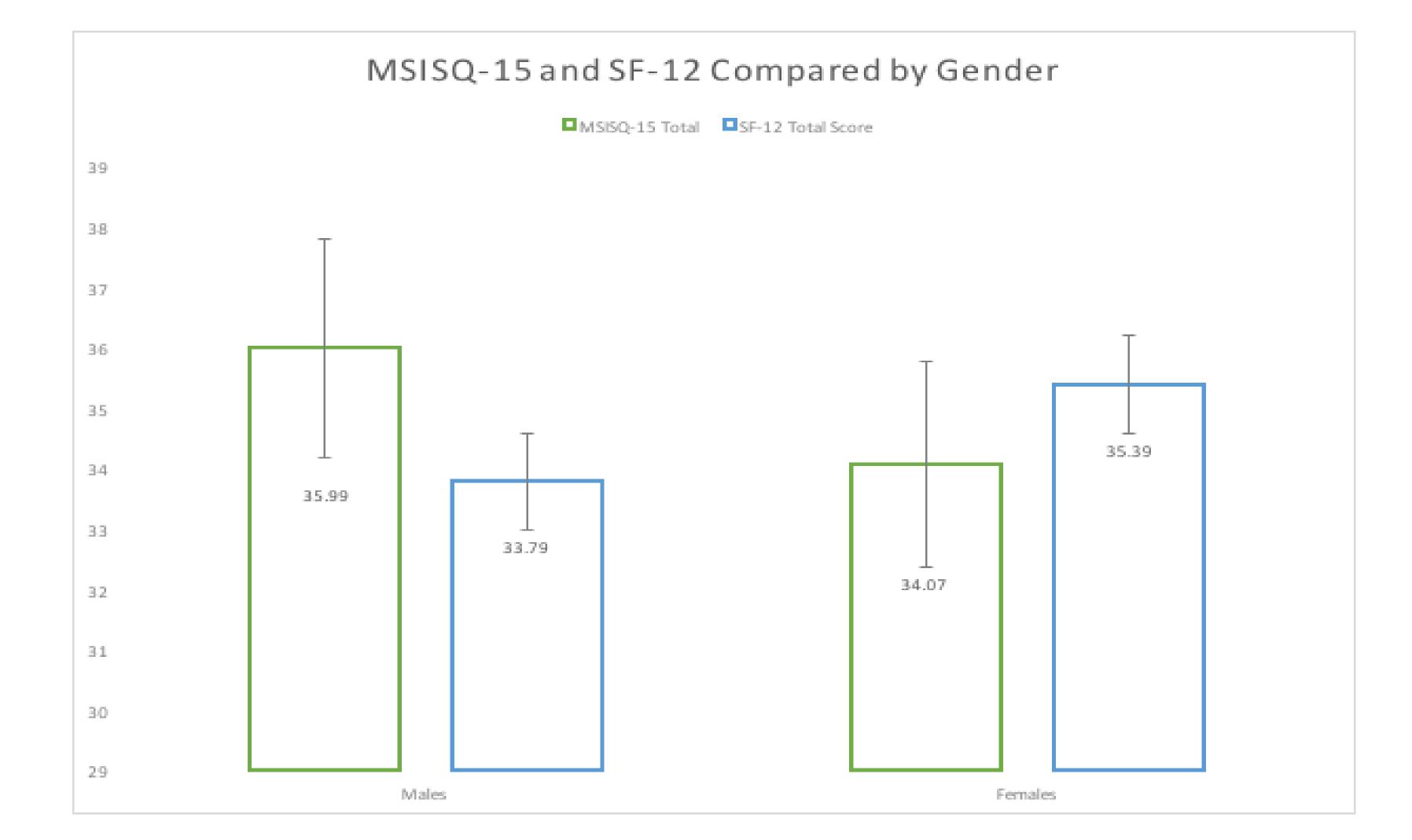
- The sample included 5,667 participants from the NARCOMS Registry (1,405 males and 4,262 females) who completed the MSISQ-15, MCS-12, PCS-12, and PDDS self-report questionnaires.
- Six hierarchical linear regressions were conducted using SPSS 25.0 to examine the association between gender and PSD, SSD, and TSD on HRQoL. MCS-12 and PCS-12 were entered as the outcome variables.
- Age, employment, and disability were entered in block 1.
- Gender, PSD, SSD, and TSD were entered in block 2.
- The interaction between gender and SD category was entered in block 3.

Results

- PSD (b = -.147, p < .001) predicted PCS-12; gender was not significant (p > .05). Gender moderated the effect between PSD and PCS-12 (b = .084, p < .001).
- PSD predicted MCS-12 (b = -.281, p < .001); gender and the moderation were not significant.
- SSD (b = -.511, p < .001) predicted PCS-12; gender was not significant. Gender moderated the effect between SSD and PCS-12 (b = .127, p < .001).
- SSD predicted MCS-12 (b = -.914, p < .001); gender and the moderation were not significant.
- Gender (b = 0.020, p<.001) and TSD (b = -.132, p<.05) predicted PCS-12. Gender moderated the effect of TSD on PCS-12 (b=.083, p<.001).
- TSD predicted MCS-12 (b = -.132, p<.05); gender and the moderation were not significant.

Demographics

	Males		Females	
	M	SD	M	SD
Age	56	11	52	10
Primary SD Total Score	14.25	5.7	14.18	6.01
Secondary SD Total Score	9.87	4.88	9.51	4.3
Tertiary SD Total Score	12.29	6.23	10.73	5.78
MSISQ-15 Total Score	36.14	14.31	34.09	13.68
SF-12 Total Score	32.55	7.78	34.24	7.97



Conclusions

- Gender moderated the relationship between PSD, SSD, TSD and PCS-12 but not MCS-12.
- Men who reported greater levels of SD were more likely to report lower levels of physical HRQoL than women.
- This difference was not found for but not mental HRQoL.

References

- 1. Zorzon, M., Zivadinov, R., Bragadin, L. M., Moretti, R., De Masi, R., Nasuelli, D., & Cazzato, G. (2001). Sexual dysfunction in multiple sclerosis: a 2-year follow-up study. *J Neurol Sci*, 187(1), 1-5.
- 2. Foley, F. W., Zemon, V., Campagnolo, D., Marrie, R. A., Cutter, G., Tyry, T., . . . Schairer, L. (2013). The Multiple Sclerosis Intimacy and Sexuality Questionnaire—re-validation and development of a 15-item version with a large US sample. *Mult Scler, 19*(9), 1197-1203.
- 3. Schairer, L. C., Foley, F. W., Zemon, V., Tyry, T., Campagnolo, D., Marrie, R. A., . . . Schairer, D. (2014). The impact of sexual dysfunction on health-related quality of life in people with multiple sclerosis. *Mult Scler*, 20(5), 610-616.