

Documents

Mansor, M.^{a c}, Chong, M.C.^a, Chui, P.L.^a, Hamdan, M.^b, Basha, M.A.M.K.^d

The psychometric properties test of the Malay version of the endometriosis health profile-30
(2023) *Saudi Medical Journal*, 44 (9), pp. 933-939.

DOI: 10.15537/smj.2023.44.9.20230228

^a The Department of Nursing Science, Faculty of Medicine, University Malaya, Kuala Lumpur, Malaysia

^b The Department of Obstetrics & Gynaecology, Faculty of Medicine, University Malaya, Kuala Lumpur, Malaysia

^c The Department of Nursing, Faculty of Medicine, University Sultan Zainal Abidin, Terengganu, Malaysia

^d The Department of Special Care Nursing, Kulliyah of Nursing, International Islamic University Malaysia, Pahang, Malaysia

Abstract

Objectives: To validate and determine the psychometric properties of the Malay version of the endometriosis health profile-30(EHP-30)(by confirmatory factor analysis. **Methods:** A cross-sectional study was carried out in the main city of Malaysia at a tertiary teaching hospital between January to April 2021. A total of 218 women diagnosed with endometriosis symptoms were recruited using the universal sampling method to answer the questionnaire. **Results:** The revised Malay version of the EHP-30 with 28 items demonstrated that the factor loading of the 28 items had an acceptable value range between 0.60-0.90. The model fit was acceptable after the inclusion of 28 items correlated errors of the root mean square of error approximation: 0.072, 90% confidence interval:]0.065-0.080[, comparative fit index)0.939(, Tucker-Lewis index)0.932(, and Chi-square/degrees of Freedom)2.135(. The Cronbach's alpha ranged from 0.89-0.97. Concurrent validity for the composite reliability was between 0.88-0.96, while the average variance extracted was between 0.65-0.74. **Conclusion:** This revised Malay version of the EHP-30 is a reliable and valid tool that can be used for the next study. © 2023 Saudi Arabian Armed Forces Hospital. All rights reserved.

Author Keywords

confirmatory factor analysis; EHP-30; endometriosis; psychometric properties; validation

Index Keywords

adult, Article, assessment of humans, clinical assessment, concurrent validity, construct validity, convergent validity, cross-sectional study, echography, education, endometriosis, endometriosis health profile 30, female, human, income, laparoscopy, major clinical study, psychometry, quality of life, smoking, teaching hospital, endometriosis, Malaysia, psychometry, reproducibility; Cross-Sectional Studies, Endometriosis, Female, Hospitals, Teaching, Humans, Malaysia, Psychometrics, Reproducibility of Results

References

- Andres, MP, Mendes, RFP, Hernandez, C, Araújo, SEA, Podgaec, S.
Hormone treatment as first line therapy is safe and relieves pelvic pain in women with bowel endometriosis
(2019) *Einstein (Sao Paulo)*, 17, p. eAO4583.
- Aerts, L, Grangier, L, Streuli, I, Dällenbach, P, Marci, R, Wenger, JM
Psychosocial impact of endometriosis: from co-morbidity to intervention
(2018) *Best Pract Res Clin Obstet Gynaecol*, 50, pp. 2-10.
- Cicinelli, E, Trojano, G, Mastromauro, M, Vimercati, A, Marinaccio, M, Mitola, PC
Higher prevalence of chronic endometritis in women with endometriosis: a possible etiopathogenetic link
(2017) *Fertil Steril*, 108, pp. 289-295.
- Evans, SF, Brooks, TA, Esterman, AJ, Hull, ML, Rolan, PE.
The comorbidities of dysmenorrhea: a clinical survey comparing symptom profile in women with and without endometriosis
(2018) *J Pain Res*, 11, pp. 3181-3194.
- La Rosa, VL, Shah, M, Kahramanoglu, I, Cerentini, TM, Ciebiera, M, Lin, LT
Quality of life and fertility preservation counseling for women with gynecological

- cancer: an integrated psychological and clinical perspective**
(2020) *J Psychosom Obstet Gynaecol*, 41, pp. 86-92.
- Roomaney, R, Kagee, A, Heylen, S.
Biopsychosocial predictors of symptoms of depression in a sample of South African women diagnosed with endometriosis
(2020) *Health Care Women Int*, 41, pp. 308-329.
 - Surrey, E, Carter, CM, Soliman, AM, Khan, S, DiBenedetti, DB, Snabes, MC.
Patient-completed or symptom-based screening tools for endometriosis: a scoping review
(2017) *Arch Gynecol Obstet*, 296, pp. 153-165.
 - Desai, HJ, Gundabattula, SR.
Quality of life in Indian women with fertility problems as assessed by the FertiQoL questionnaire: a single center cross sectional study
(2019) *J Psychosom Obstet Gynaecol*, 40, pp. 82-87.
 - Laganà, AS, La Rosa, VL, Rapisarda, AMC, Valenti, G, Sapia, F, Chiofalo, B
Anxiety and depression in patients with endometriosis: impact and management challenges
(2017) *Int J Womens Health*, 9, pp. 323-330.
 - Rowe, H, Quinlivan, J.
Let's not forget endometriosis and infertility amid the covid-19 crisis
(2020) *J Psychosom Obstet Gynaecol*, 41, pp. 83-85.
 - Chowdhury, TS, Mahmud, N, Chowdhury, TA.
Endometriosis: correlation of severity of pain with stages of disease
(2016) *J Bangladesh college phy surg*, 34, pp. 135-139.
 - Yasui, T, Hayashi, K, Nagai, K, Mizunuma, H, Kubota, T, Lee, JS
Risk profiles for endometriosis in Japanese women: results from a repeated survey of self-reports
(2015) *J Epidemiol*, 25, pp. 194-203.
 - Tanmahasamut, P, Noothong, S, Sanga-Areekul, N, Silprasit, K, Dangrat, C.
Prevalence of endometriosis in women undergoing surgery for benign gynecologic diseases
(2014) *J Med Assoc Thai*, 97, pp. 147-152.
 - Yamamoto, A, Johnstone, EB, Bloom, MS, Huddleston, HG, Fujimoto, VY.
A higher prevalence of endometriosis among Asian women does not contribute to poorer IVF outcomes
(2017) *J Assist Reprod Genet*, 34, pp. 765-774.
 - Moradi, M, Parker, M, Sneddon, A, Lopez, V, Ellwood, D.
The endometriosis impact questionnaire)EIQ(: a tool to measure the long-term impact of endometriosis on different aspects of women's lives
(2019) *BMC Womens Health*, 19, p. 64.
 - Kiykac Altinbas, S, Bayoglu Tekin, Y, Dilbaz, B, Dilbaz, S.
Evaluation of quality of life in fertile Turkish women with severe endometriosis
(2015) *J Obstet Gynaecol*, 35, pp. 49-52.
 - Laas, E, Zacharopoulou, C, Montanari, G, Seracchioli, R, Abrão, MS, Bassi, MA
External validation of the SF-36 quality-of-life questionnaire in Italian and Brazilian populations to select patients with colorectal endometriosis for surgery
(2015) *J Minim Invasive Gynecol*, 22, pp. 378-383.

- (2001) *The endometriosis health profile)EHP,*
(Updated accessed 2023 Feb 15)
- Jones, G, Jenkinson, C, Taylor, N, Mills, A, Kennedy, S.
Measuring quality of life in women with endometriosis: tests of data quality, score reliability, response rate and scaling assumptions of the endometriosis health profile questionnaire
(2006) *Hum Reprod*, 21, pp. 2686-2693.
- Khong, SY, Lam, A, Luscombe, G.
Is the 30-item endometriosis health profile)EHP-30(suitable as a self-report health status instrument for clinical trials?
(2010) *Fertil Steril*, 94, pp. 1928-1932.
- Florentino, AVA, Pereira, AMG, Martins, JA, Lopes, RGC, Arruda, RM.
Quality of life assessment by the endometriosis health profile)EHP-30(questionnaire prior to treatment for ovarian endometriosis in Brazilian women
(2019) *Rev Bras Ginecol Obstet*, 41, pp. 548-554.
- Van de Burgt, TJ, Hendriks, JC, Kluivers, KB.
Quality of life in endometriosis: evaluation of the Dutch-version endometriosis health profile-30)EHP-30
(2011) *Fertil Steril*, 95, pp. 1863-1865.
- Grundström, H, Rauden, A, Wikman, P, Olovsson, M.
Psychometric evaluation of the Swedish version of the 30-item endometriosis health profile)EHP-30
(2020) *BMC Womens Health*, 20, p. 204.
- Nogueira-Silva, C, Costa, P, Martins, C, Barata, S, Alho, C, Calhaz-Jorge, C
Validation of the Portuguese version of EHP-30)the endometriosis health profile-30
(2015) *Acta Med Port*, 28, pp. 347-356.
- Nojomi, M, Bijari, B, Akhbari, R, Kashanian, M.
The assessment of reliability and validity of Persian version of the endometriosis health profile)EHP-30
(2011) *Iran J Med Sci*, 36, pp. 84-89.
- Verket, NJ, Andersen, MH, Sandvik, L, Tanbo, TG, Qvigstad, E.
Lack of cross-cultural validity of the endometriosis health profile-30
(2018) *J Endometr Pelvic Pain Disord*, 10, pp. 107-115.
- Jia, SZ, Leng, JH, Sun, PR, Lang, JH.
Translation and psychometric evaluation of the simplified Chinese-version endometriosis health profile-30
(2013) *Hum Reprod*, 28, pp. 691-697.
- Selcuk, S, Sahin, S, Demirci, O, Aksoy, B, Eroglu, M, Ay, P
Translation and validation of the endometriosis health profile)EHP-5(in patients with laparoscopically diagnosed endometriosis
(2015) *Eur J Obstet Gynecol Reprod Biol*, 185, pp. 41-44.
- Marí-Alexandre, J, García-Oms, J, Agababayan, C, Belda-Montesinos, R, Royo-Bolea, S, Varo-Gómez, B
Toward an improved assessment of quality of life in endometriosis: evaluation of the Spanish version of the endometriosis health profile 30
(2022) *J Psychosom Obstet Gynaecol*, 43, pp. 251-257.
- Narwani, H, Shuhaila, A.
An evaluation of quality of life in women with endometriosis who underwent primary surgery: a 6-month follow up in Sabah Women and Children Hospital, Sabah,

Malaysia

(2017) *J Obstet Gynaecol*, 37, pp. 906-911.

M F A

- Kyriazos, TA.
Applied psychometrics: sample size and sample power considerations in factor analysis)EFA, CFA(and SEM in general
(2018) *Psych*, 9, pp. 2207-2230.
- Awang, Z, Lim, SH, Zainudin, NF.
(2018) *Pendekatan Mudah SEM*,
Updated accessed 2023 Feb 25[link provided
- Jones, G, Jenkinson, C, Kennedy, S.
The impact of endometriosis upon quality of life: a qualitative analysis
(2004) *J Psychosom Obstet Gynaecol*, 25, pp. 123-133.
- Edwards, BD.
Book review: Timothy A. Brown. Confirmatory factor analysis for applied research)2006,
(Updated 2003; accessed 2023 Feb 25
- Fornell, C, Larcker, D.
Evaluating structural equation models with unobservable variables and measurement error
(2016) *J Marketing Research*, 18, pp. 39-50.
- Almaleki, D.
The precision of the overall data-model fit for different design features in confirmatory factor analysis
(2021) *ETASR*, 11, pp. 6766-6774.

Correspondence Address

Chong M.C.; Department of Nursing Science, Malaysia; email: mcchong@um.edu.my

Publisher: Saudi Arabian Armed Forces Hospital

ISSN: 03795284

CODEN: SAMJD

PubMed ID: 37717967

Language of Original Document: English

Abbreviated Source Title: Saudi Med. J.

2-s2.0-85171520152

Document Type: Article

Publication Stage: Final

Source: Scopus

ELSEVIER

Copyright © 2023 Elsevier B.V. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

 RELX Group™