

London Measure of Unplanned Pregnancy and newer family forms: an update

Geraldine Barrett*

Elizabeth M. Nolan

Zeynep B. Gürtin

Judith Stephenson

Jennifer A. Hall

Research Department of Reproductive Health, UCL Elizabeth Garrett Anderson Institute for Women's Health, University College London, London, UK

**Corresponding author.*

Postal address: Research Department of Reproductive Health, UCL EGA Institute for Women's Health, Medical School Building, 74 Huntley Street, London WC1E 6AU

Email: g.barrett@ucl.ac.uk

This article has been accepted for publication in *Journal of Epidemiology and Community Health*, 2020, following peer review, and the Version of Record can be accessed online at DOI: <http://dx.doi.org/10.1136/jech-2020-214419>

Copyright information: © Authors (or their employer) 2020. No commercial re-use. See rights and permissions. Published by BMJ.

The London Measure of Unplanned Pregnancy (LMUP), a psychometric measure of pregnancy intention based on lay views, was published in this journal in 2004(1) and is now validated in 15 languages.(2) Since its development, there has been a growth in same sex couples having children, women choosing to become mothers without a partner, and non-romantic partners choosing to become parents together.(3) The LMUP is intended to be suitable for all pregnant women and item 5 (about partner discussion) is potentially exclusionary. We aimed to update item 5 to incorporate newer family forms.

Our study's first stage was qualitative, comprising cognitive interviews to generate and test amendments to item 5. The second, quantitative, stage aimed to assess the basic psychometric properties of the updated LMUP. We considered >5% to be an unacceptable level of missing data.(4) Data collection was via the P3 Study.(5) UCL Research Ethics Committee granted approvals.

Stage 1 comprised 31 interviewees: 1) women who identified as solo mothers by choice; 2) women in same sex partnerships; and 3) other women. All group 1 and 2 mothers, and one group 3 mother, conceived via assisted conception. Women were aged 31-50. In stage 2 there were 69 women: 53 currently pregnant and 16 pregnant in the last three months (13 miscarriages, two abortions, one ectopic pregnancy), with a mix of spontaneous and assisted conceptions. Women were aged 19-45.

We tested two versions of the introductory sentence to item 5, quickly settling on the final version (box 1). This was considered "broader", "more open", and "more inclusive". We tested two additional response options: "I chose to become pregnant without a partner" and "I chose [*ibid*], for instance using sperm donation". Both response options were well understood and selected appropriately so we took the shorter response option forward (box 1). In stage 2, there were no missing data for item 5. One woman selected the new response option. LMUP scores ranged from 1-12, Cronbach's alpha =0.91, inter-item correlations were positive, and item-rest correlations were 0.65 to 0.86, with 0.75 for item 5, showing the updated LMUP remains valid.

We recommend that the updated item 5 is used in the UK, with a score of 2 for the new response option. The update will be most relevant to other developed countries. As with all country/cultural/language adaptations, item 5 should be tailored to be appropriate to the local context.

Box 1: Updated item 5 of the LMUP

In the next question, we use the word “partner” - this might be (or have been) your husband/wife/civil partner, a partner you live with, a partner who lives elsewhere, someone you’ve had sex with once or twice, or a parenting (non-romantic) partner

Before I became pregnant....

(Please tick the statement which most applies to you)

- My partner and I had agreed that we would like me to be pregnant
- My partner and I had discussed having children together, but hadn’t agreed for me to get pregnant
- We never discussed having children together
- I chose to become pregnant without a partner

References

1. Barrett G, Smith SC, Wellings K. Conceptualisation, development, and evaluation of a measure of unplanned pregnancy. *J Epidemiol Community Health*. 2004;58(5):426-33.
2. London Measure of Unplanned Pregnancy: LMUP versions 2020. Available from: www.lmup.org.uk/versions.htm. (Accessed April 2020)
3. Gurtin ZB, Faircloth C. Conceiving contemporary parenthood: imagining, achieving and accounting for parenthood in new family forms. *Anthropol Med*. 2018;25(3):243-8.
4. Loewenthal KM. *An Introduction to Psychological Tests and Scales*. 2nd Edition ed. London: Psychology Press; 2001.
5. The P3 Study: assessing women's feelings and preferences regarding a future pregnancy - a cohort study 2020. Available from: <https://p3-study-ucl.co.uk/>. (Accessed April 2020)