



Jacquelyn Romaine ^a, Miranda Murray ^b & Clare Bradley ^{a, c}

^a Health Psychology Research Unit, Royal Holloway, University of London, Egham, Surrey, TW20 0EX UK, ^b ViiV Healthcare Ltd, 980 Great West Road, Brentford, London, TW8 9GS UK, ^c Health Psychology Research Ltd, Royal Holloway, University of London, Egham, Surrey, TW20 0EX UK.

P066

BACKGROUND

The few studies to attempt to measure quality of life in people with HIV have relied on measures of treatment satisfaction or health status rather than genuine measures of quality of life. Based on a questionnaire template first developed for people with diabetes (Audit of Diabetes Dependent QoL: ADDQoL) [1,2] the HIVDQoL (HIV Dependent Quality of Life) questionnaire provides a QoL measure that recognises individuals differ both in the aspects of life relevant to them, and in the importance each aspect of life has for their QoL, as well as differing in the level of impact HIV has on these aspects of life. This abstract reports initial data analysis using the newly developed HIVDQoL.

METHOD

Design: Using a survey design 255 participants (UK=128, US=127), recruited via the internet completed the questionnaire individually (via post) or with a researcher (via phone). See Table 1 for details.

Measure: The HIVDQoL uses the template from the ADDQoL for diabetes¹ and -DQoLs for other conditions and includes two overview items (general 'present QoL': measured using a 7-point Likert scale and 'HIV-specific QoL': measured using a 5-point Likert scale) and 26 domain-specific two-part items. Each domain-specific item measures HIV impact and importance for QoL. Twelve items have a not-applicable option (see Figure 1). Impact scores (-3 to +1) are multiplied by importance (3 to 0) to give Weighted Impact (WI) scores. In this way the HIVDQoL is sensitive to the fact that any given aspect of life may have different significance to different individuals and as such is likely to have varying impact on QoL and that the importance of a particular aspect of life may change over time even for the same individual. WI scores are summed and divided by the number of applicable items giving an average weighted impact (AWI) score (-9 greatest negative impact to +3 greatest positive impact). The HIVDQoL thereby provides a highly personalised assessment of the impact of HIV on an individual's QoL.

2	Are you currently working (paid or voluntary work)? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, complete (a) and (b) If no, would you like to work? Yes <input type="checkbox"/> No <input type="checkbox"/> If yes, complete (a) and (b) If no to both questions, go straight to 3
(a)	If I did not have HIV, my working life would be: -3 very much better -2 much better -1 a little better 0 the same 1 worse
(b)	For me, having a working life is: 3 very important 2 important 1 somewhat important 0 not at all important

Figure 1: Example of a HIVDQoL domain-specific item that includes a non-applicable option. Scoring for demonstration only

RESULTS

As shown in Table 1 the mean age of participants in the UK was younger and time since diagnosis less, than for participants in the US. In the UK, 77% of participants were men and 23% women and in the US, 82% of participants were men and 18% women.

Table 1: Participant Details

Country	N	Age				Sex		Years since Diagnosis			
		Mean	SD	Min	Max	Men	Women	Mean	SD	Min	Max
UK	128	47	9.10	25	72	99	29	12	8.30	1	30
US	127	51	11.68	25	78	104	20	19	9.40	0	36

Using the two HIVDQoL overview items Independent-samples t-tests were conducted to compare general QoL and HIV-specific QoL for UK and US participants. A significant difference was found in scores for general QoL $t(253) = -5.297, p < 0.001$. As shown in Figure 2, participants in the US reported better general QoL than those in the UK. In regard to the second overview item measuring HIV-specific QoL, although participants in both the UK and US reported that their quality of life would be better if they did not have HIV, no significant difference between countries was found $t(249) = -0.369, p = 0.712$.

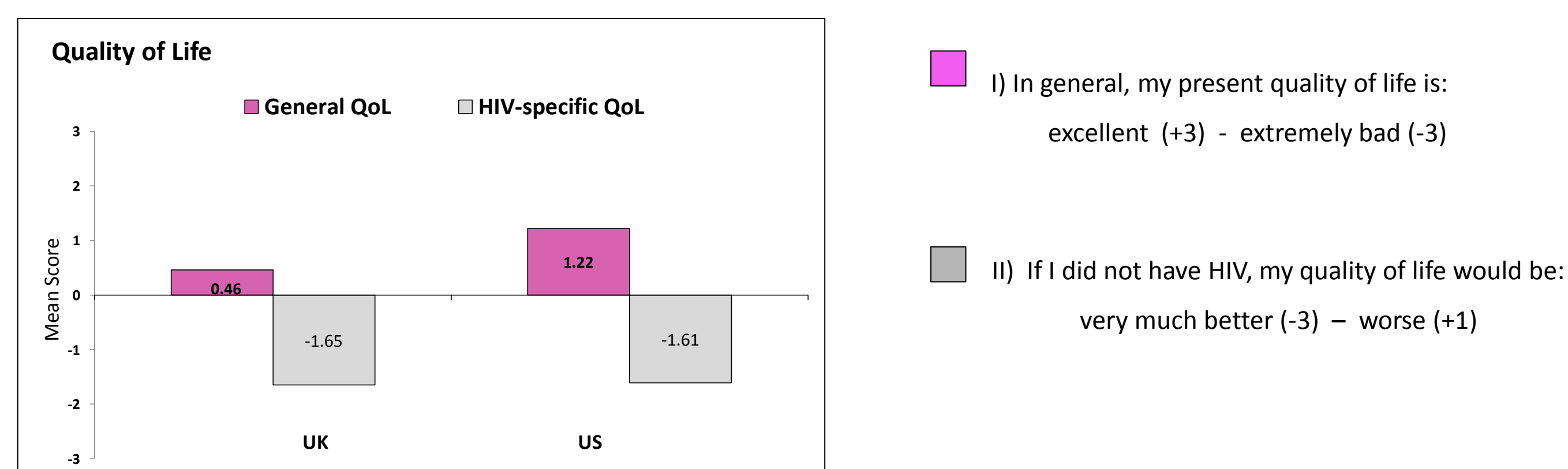


Figure 2: Comparison of general and HIV-specific quality of life mean scores for UK and US participants

ENQUIRIES & ACKNOWLEDGEMENTS

Corresponding author: Jacquelyn Romaine PhD Postdoctoral Research Fellow in Health Psychology Email: jackie.romaine@rhul.ac.uk

Information on this and other questionnaires: Visit www.healthpsychologyresearch.com

Research Funded by GSK/ViiV Healthcare.

RESULTS

Individual QoL Domains by Country: Examination of mean WI scores for each domain-specific item found that for individuals living in the UK all 26 life domains are negatively impacted by HIV and all domains, except religion, are negatively impacted for individuals living in the US. The stigma associated with HIV was the domain where QoL was most negatively impacted by HIV in both the UK and US (see Figure 3).

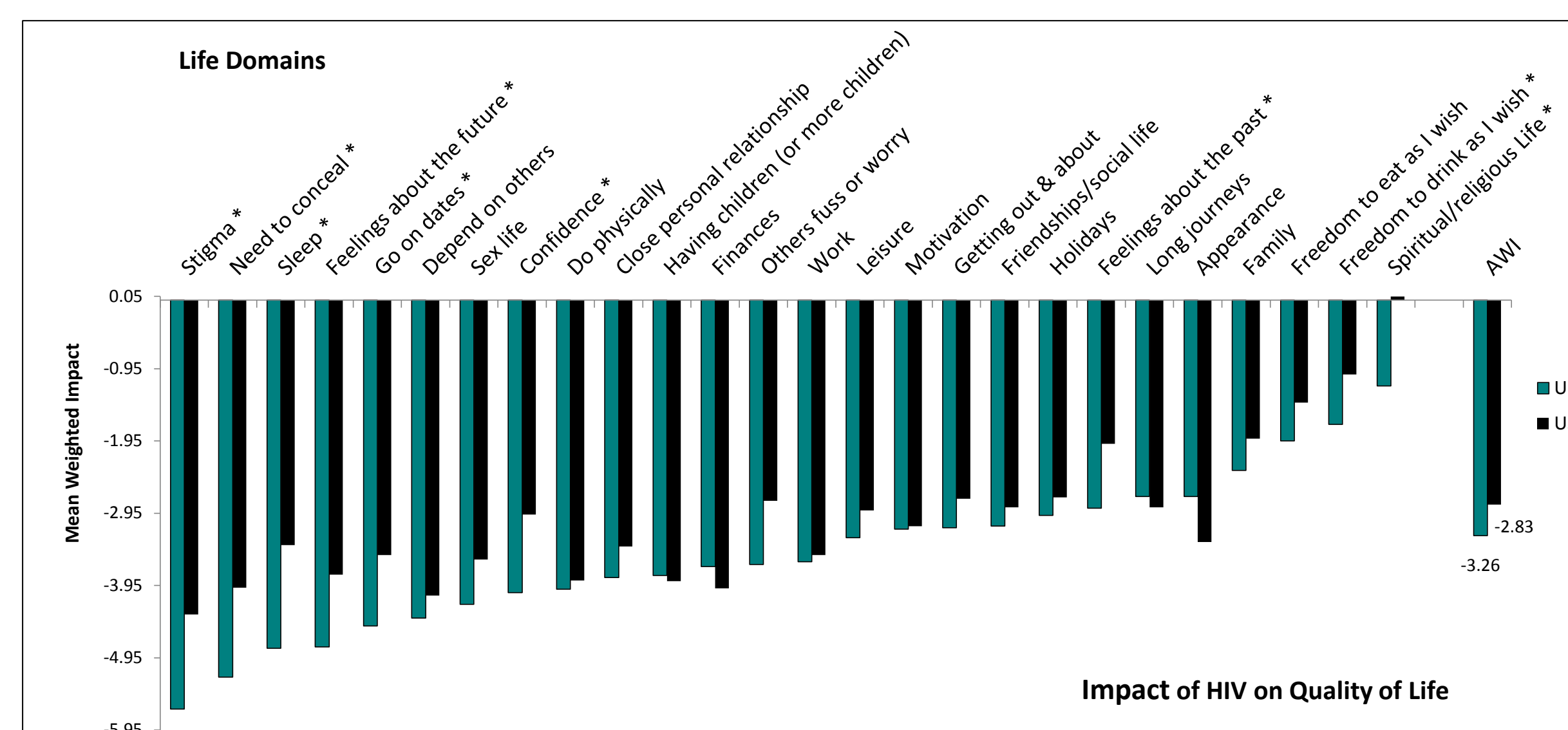


Figure 3: Weighted impact scores ordered by greatest negative impact

In 22 of 26 individual domains UK participants reported greater negative Impact of HIV on QoL than US participants. Independent samples t-tests ($*p < 0.05$) revealed nine differences were significant (see Figure 3). No significant difference was found for AWI scores.

Analyses (ANCOVA) comparing AWI scores by country whilst controlling for age, sex and years since diagnosis revealed no significant differences in scores whilst controlling for age and sex. A significant difference was found for years since diagnosis $F(1, 252) = 6.093, p = 0.014$, although the effect size was small, partial eta squared = 0.024. Examination of the estimated marginal means (see Figure 4) revealed that, when years since diagnosis is controlled for, participants living in the UK report significantly greater negative impact of HIV on QoL than participants living in the US.

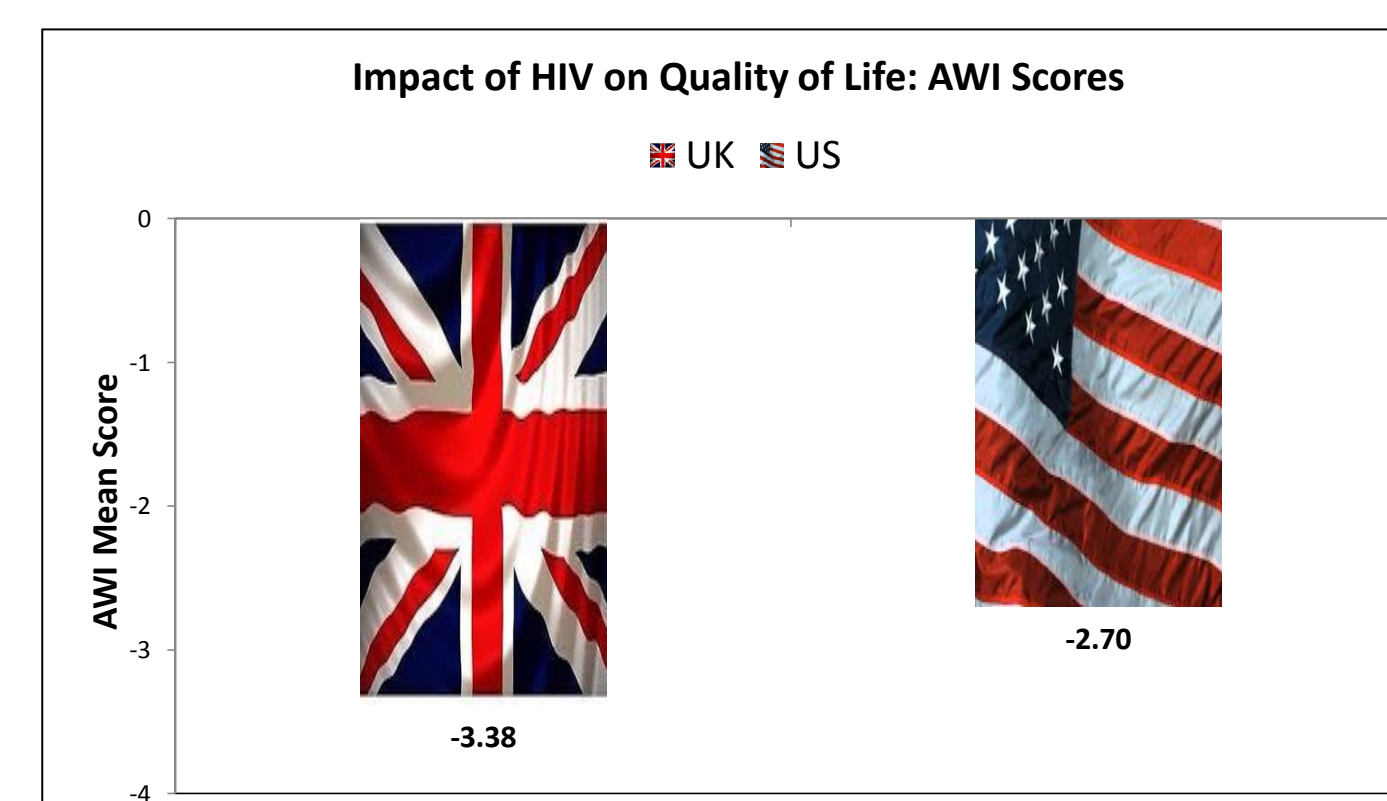


Figure 4: Comparison of QoL for UK and US participants as measured by AWI scores whilst controlling for years since diagnosis

Individual QoL Domains by Sex: Examination of mean WI scores for each life domain split by sex, found that all domains were negatively impacted by HIV and that women reported greater negative impact of HIV on QoL in 20 out of 26 domains. Stigma was reported as the life domain most negatively impacted by HIV by both men and women. Spiritual/religious life and freedom to eat and drink were the least negatively impacted. The largest differences were found for close personal relationship and feelings about the future (see Figure 5). Independent samples t-tests revealed no significant differences.

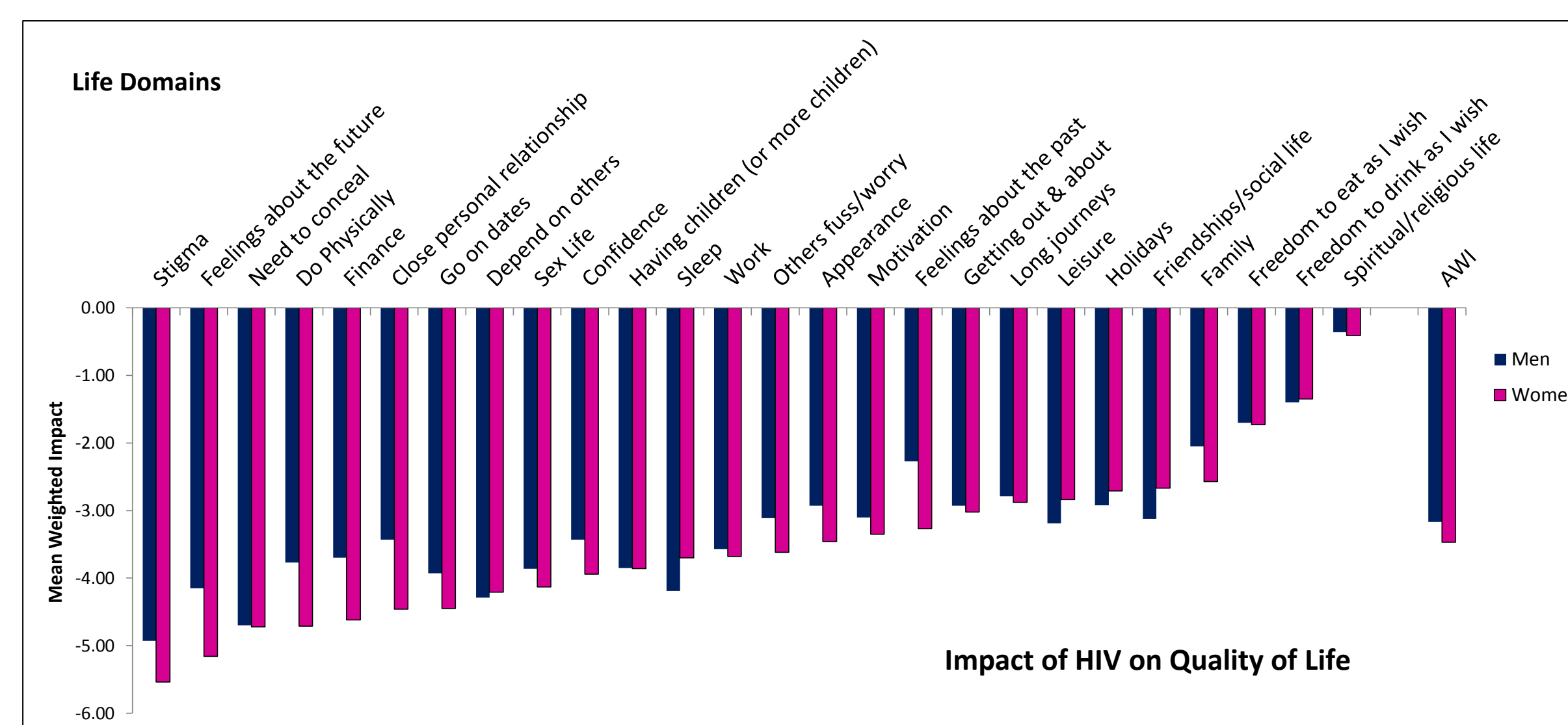


Figure 5: Weighted impact scores by sex ordered by greatest negative impact for women

CONCLUSIONS

The HIVDQoL reveals specific areas of QoL most negatively impacted by HIV, including stigma and feelings about the future. Overall the HIVDQoL shows worse generic QoL and greater negative impact of HIV on the QoL of UK participants vs US participants and highlights potential concerns about the impact on women. By identifying the specific areas of life most negatively impacted by HIV, the HIVDQoL can identify priority areas of concern and facilitate more targeted efforts to meet the greatest challenges for individuals and populations with HIV.

REFERENCES

- Bradley, C., Todd, C., Gorton, T., Symonds, E., Martin, A., Plowright, R. (1999). The development of an individualized questionnaire measure of perceived impact of diabetes on quality of life: The ADDQoL. *Quality of Life Research*, 8, 79-91.
- Wee, H.L., Tan, C.E., Goh, S.Y., & Li, S.C. (2006). Usefulness of the Audit of Diabetes-Dependant Quality of Life (ADDQoL) questionnaire in patients with diabetes in a multi-ethnic Asian country. *Pharmacoeconomics* 24(7), 673-682.