**Appendix**

**Figure I.** Stages in the adaptation process of the Pregnancy Physical Activity Questionnaire to Spanish.



|  |
| --- |
| **Table I**Questions arising in the process of direct and reverse translation and raised on the cognitive test. |
| **Items** | **Detected problem** | **Consensus term** |
| Item 2 of PPAQPeriod | The conceptual equivalence between period and “*periodo*” or “*menstruacion*” was raised | *Periodo*, because of the women preference following the results of the cognitive test and its used among gynaecologist |
| Item 26 of PPAQJogging | The conceptual equivalence between jogging and “*trotar suavemente*” or “*correr suavemente*” was raised  | *Correr*, because of its lower comprehension difficulty following the results of the cognitive test |
| Item 33 and 34 of PPAQCarrying  | The conceptual equivalence and comprehension difficulty between carrying and “*portar*” or “*sostener*” was raised | *Sostener*, because of the women preference following the results of the cognitive test |

|  |
| --- |
| **Table II**Examples of the complete process of transcultural adaptation. |
| **Process of transcultural adaptation** | **Item 2 of PPAQ** | **Item 26 of PPAQ** | **Item 33 of PPAQ** |
| Original version | What was the first day of your last period? | How much time do you usually spend: Jogging | How much time do you usually spend: Standing or slowly walking at work while carrying things |
| Direct translation A | ¿Cuál fue el primer día de su última menstruación? | Durante este trimestre, ¿cuánto tiempo emplea habitualmente trotando? | ¿Cuánto tiempo suele emplear de pie o caminando lentamente en el trabajo mientras porta cosas? |
| Equivalence  | 10 | 9 | 8 |
| Difficulty | 1 | 2 | 2 |
| Direct translation B | ¿Cuál fue el primer día de su último periodo? | Durante este trimestre, ¿cuánto tiempo emplea habitualmentecorriendo? | ¿Cuánto tiempo suele emplear de pie o caminando lentamente en el trabajo mientras sostiene cosas? |
| Equivalence | 9 | 8 | 8 |
| Difficulty | 1 | 2 | 3 |
| First consensus version | ¿Cuál fue el primer día de su último periodo? | Durante este trimestre, ¿cuánto tiempo emplea habitualmente trotando suavemente? | ¿Cuanto tiempo suele emplear de pie o caminando lentamente en el trabajo mientras sostiene cosas? |
| Reverse translation | When was the first day of your last period? | During this trimester how much time do you usually spend: Gentle Jogging  | How much time do you usually spend: Standing or walking slowly at work while carrying things |
| Second consensus version | Two options suggested to pregnant women in the cognitive test:*¿Cuál fue el primer día de su último periodo?**¿Cuál fue el primer día de su última menstruación?* | Two options suggested to pregnant women in the cognitive test:*Durante este trimestre, ¿cuánto tiempo emplea habitualmente corriendo suavemente?**Durante este trimestre, ¿cuánto tiempo emplea habitualmente trotando suavemente?* | Two options suggested to pregnant women in the cognitive test:*¿Cuánto tiempo suele emplear de pie o caminando lentamente en el trabajo mientras sostiene cosas?**¿Cuánto tiempo suele emplear de pie o caminando lentamente en el trabajo mientras porta cosas?* |
| Cognitive Test | Most of pregnant women (8/16) preferred the option “*periodo*” to “*menstruación*”, Two pregnant women didn’t found differences between both terms. *Periodo:* they recognised the use of this term more usual in their daily life and in their conversation with the gynaecologist*Menstruación:* they attributed lower use of this term.  | Most of pregnant women (14/16) preferred the option “*corriendo suavemente*” to “*trotando suavemente*”. *Correr:* They attributed lower comprehension difficulty*Trotar:* they attributed higher comprehension difficulty and some of them did not understand its meaning | All of the pregnant women preferred the option “*sostienes*” to “*portas*”. They believed “*sostienes*” has a higher conceptual equivalence and lower comprehension difficulty than “*portas*”*Sostener:* this term has a lower comprehension difficulty and its use is more common in Spanish.*Portar*: this term has a higher comprehension difficulty.  |
| Final version | ¿Cuál fue el primer día de su último periodo? | Durante este trimestre, ¿cuánto tiempo emplea habitualmente corriendo suavemente? | ¿Cuánto tiempo suele emplear de pie o caminando lentamente en el trabajo mientras sostiene cosas? |

|  |
| --- |
| **Table III**Comparison of total activity between SenseWear Armband and Pregnancy Physical Activity Questionnaire in pregnant women by age, body mass index, and trimester of gestation, parity, occupational and educational level in pregnant women (n = 208). |
|  | **Total activity (light and above)** | **Moderate to vigorous activity** |
|  | Estimated (SWA)(min/d) | **Self-reported (PPAQ)****(min/d)** | **p value between methods** | **DM (SD) (min/d)** | **CCC** | **Pearson** | **PPearson** | **Estimated (SWA)****(min/d)** | **Self-reported (PPAQ)****(min/d)** | **p value between methods** | **DM (SD)****(min/d)** | **CCC** | **Pearson** | **PPearson** |
| *All (N = 208)* | 101.8 (31.2) | 134.1 (62.0) | 0.000 | 32.3 | (63.6) | 0.13 | 0.20 | 0.004 | 36.5 (19.4) | 41.6 (43.4) | 0.121 | 5.2 | (47.8) | -0.01 | -0.02 | 0.826 |
| *Age* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20-30 years (n=48) | 106.3 (32.5) | 126.2 (63.4) | 0.034 | 19.9 | (63.1) | 0.20 | 0.26 | 0.070 | 40.0 (19.0) | 41.8 (49.8) | 0.819 | 1.8 | (54.0) | -0.03 | -0.04 | 0.788 |
| 31-44 years (n=160) | 100.4 (30.8) | 136.5 (61.6) | 0.000 | 36.1 | (63.4) | 0.12 | 0.19 | 0.016 | 35.4 (19.4) | 41.6 (41.5) | 0.091 | 6.2 | (46.0) | -0.01 | -0.01 | 0.927 |
| p value between groups | 0.257 | 0.313 |  |  |  |  |  |  | 0.147 | 0.974 |  |  |  |  |  |  |
| *BMI (kg/m2)* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <25 (n = 126) | 109.7 (29.9) | 130.4 (60.5) | 0.000 | 20.7 | (61.9) | 0.15 | 0.20 | 0.023 | 40.9 (19.6) | 38.2 (39.7) | 0.483 | -2.7 | (44.0) | 0.01 | 0.01 | 0.875 |
| ≥25 (n = 82) | 88.6 (29.0) | 140.3 (64.4) | 0.000 | 51.8 | (61.9) | 0.15 | 0.31 | 0.006 | 29.2 (16.8) | 47.5 (48.7) | 0.002 | 18.3 | (51.2) | 0.01 | 0.02 | 0.864 |
| p value between groups | 0.000 | 0.262 |  |  |  |  |  |  | 0.000 | 0.134 |  |  |  |  |  |  |
| *Trimester* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Second (n = 130) | 106.0 (32.2) | 149.9 (62.2) | 0.000 | 41.0 | (62.6) | 0.15 | 0.25 | 0.006 | 38.7 (19.4) | 48.6 (47.5) | 0.033 | 9.8 | (51.1) | 0.01 | 0.02 | 0.863 |
| Third (n = 78) | 95.3 (28.6) | 114.4 (56.7) | 0.007 | 19.1 | (63.2) | 0.01 | 0.01 | 0.896 | 33.0 (18.9) | 31.0 (33.8) | 0.668 | -2.0 | (41.7) | -0.16 | -0.18 | 0.100 |
| p value between groups | 0.016 | 0.000 |  |  |  |  |  |  | 0.036 | 0.004 |  |  |  |  |  |  |
| *Parity* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 (n = 114) | 97.3 (30.1) | 117.8 (52.0) | 0.000 | 20.5 | (51.9) | 0.23 | 0.29 | 0.002 | 36.6 (19.3) | 34.7 (42.9) | 0.680 | -1.8 | (46.7) | 0.01 | 0.02 | 0.845 |
| >1 (n = 94) | 107.1 (31.8) | 153.9 (67.5) | 0.000 | 46.7 | (73.1) | 0.03 | 0.05 | 0.609 | 36.4 (19.6) | 50.0 (42.7) | 0.007 | 13.6 | (48.0) | -0.04 | -0.05 | 0.600 |
| p value between groups | 0.024 | 0.000 |  |  |  |  |  |  | 0.952 | 0.011 |  |  |  |  |  |  |
| *Occupational status* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Workers (n = 101) | 104.4 (29.8) | 148.5 (58.6) | 0.000 | 44.1 | (55.8) | 0.19 | 0.35 | 0.000 | 35.6 (17.6) | 56.4 (50.1) | 0.000 | 20.7 | (52.1) | 0.03 | 0.05 | 0.587 |
| Non-workers (n = 103) | 99.7 (32.8) | 118.6 (61.0) | 0.005 | 18.9 | (66.4) | 0.08 | 0.10 | 0.328 | 37.5 (21.0) | 26.3 (28.7) | 0.002 | -11.2 | (36.1) | -0.03 | -0.03 | 0.738 |
| p value between groups | 0.423 | 0.001 |  |  |  |  |  |  | 0.708 | 0.000 |  |  |  |  |  |  |
| *Educational level* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Non-tertiary (n = 109) | 105.8 (32.5) | 133.0 (64.8) | 0.000 | 27.2 | (66.4) | 0.14 | 0.20 | 0.037 | 38.2 (19.5) | 42.4 (32.3) | 0.339 | 4.3 | (46.4) | 0.01 | 0.01 | 0.901 |
| Tertiary (n = 99) | 97.4 (29.3) | 135.4 (59.1) | 0.000 | 38.0 | (60.1) | 0.13 | 0.21 | 0.035 | 34.6 (19.2) | 40.8 (44.8) | 0.219 | 6.2 | (49.6) | -0.03 | -0.05 | 0.637 |
| p value between groups | 0.053 | 0.782 |  |  |  |  |  |  | 0.192 | 0.788 |  |  |  |  |  |  |
| BMI: body mass index; CCC: concordance correlation coefficient; DM: difference mean between methods; Pearson: Pearson correlation coefficient; PPearson: p value for Pearson correlation coefficient; SD: standard deviation. |