PMR152
TRANSLATION AND CULTURAL ADAPTATION OF THE POLISH VERSION OF “DISABILITIES OF THE ARM, SHOULDER AND HAND” (DASH) AND QUICKDASH QUESTIONNAIRES
Golicki D, Kryszak M, Strzelczyk P
Department of Rehabilitation, Institute of Medical Rehabilitation and Occupational Therapy, Poznan, Poland, 2Center for Medical Rehabilitation, IOZJ, Warsaw, Poland
OBJECTIVES: To translate into Polish and adapt culturally DASH and QuickDASH outcome measures. METHODS: We followed recommendations issued by Institute for Work and Health (IWH, 2007). Two forward translations were made – by an informed (T1) and uninformed translator (T2). Discrepancies were discussed and resolved with participation of the third unbiased investigator and a synthesis of translations was produced (T12). Two native speakers, totally blind to the original translation, translated back T12 version into English (BT1 and BT2). Eight experts: 2 orthopedic surgeons, physical therapists, clinical psychologists, 2 English language specialists, 1 Polish and a Polish language specialist formed an Expert Committee (EC). Committee consoli-
dated all the versions, reviewed all the translations and reached a consensus on any discrepancy found. Decisions were made to achieve semantic, idiomatic, experi-
tial and conceptual equivalence with the original version. RESULTS: We report 65 discrepancies raised by Expert Committee members and their solutions. The Polish pre-final versions of DASH and QuickDASH questionnaires, ready for pilot testing, were produced. Written reports from all stages of the process were submitted to the IWH Cross-Cultural Adaptation Review Committee for approval. CONCLUSIONS: Numerous translation discrepancies were resolved by discussion by Expert Committee. The Polish pre-final versions of DASH and QuickDASH questionnaires were produced and used in pilot testing.

PMR153
LINGUISTIC TRANSLATION AND CULTURAL ADAPTATION OF FUNCTIONAL ASSESSMENT OF CHRONIC ILLNESS THERAPY-TUBERCULOSIS INSTRUMENT INTO ARABIC LANGUAGE
Dalal A, 1Syed Sulaiman SA, 1Hassali MA, 1Awaura A, 1Bibby D, 1Dujali MA, 1Bredie P
1Universiti Sains Malaysia, Minden, Malaysia, 2Universiti Sains Malaysia, Penang, Malaysia, 3Qatar University, Doha, Qatar, 4Bengal Medical City, Bagdhad, Iraq, 5FACTTrans, Elmhurst, IL, USA
OBJECTIVES: Functional Assessment of Cancer Therapy-General (FACT-G) was adapted to develop a disease specific subscale for pulmonary tuberculosis (PTB) patients in Iraq. The current study aims to linguistically validate Functional Assessment of Chronic Illness Therapy-Tuberculosis (FACT-TB) measurement scale into Arabic language and to produce a translated version which was conceptually equivalent to the original U.S. English version for use in clinical practice and research. METHODS: We used the forward-backward procedure. The linguistic experts were of different cultural and linguistic backgrounds. Discrepancies raised by Expert Committee members and their solutions. The Polish language specialist formed an Expert Committee (EC). Committee consoli-
dated all the versions, reviewed all the translations and reached a consensus on any discrepancy found. Decisions were made to achieve semantic, idiomatic, experi-
tial and conceptual equivalence with the original version. RESULTS: We report 65 discrepancies raised by Expert Committee members and their solutions. The Polish pre-final versions of DASH and QuickDASH questionnaires, ready for pilot testing, were produced. Written reports from all stages of the process were submitted to the IWH Cross-Cultural Adaptation Review Committee for approval. CONCLUSIONS: Numerous translation discrepancies were resolved by discussion by Expert Committee. The Polish pre-final versions of DASH and QuickDASH questionnaires were produced and used in pilot testing.

PMR154
ESTIMATING THE SOCIAL DISTRIBUTION OF HEALTH IN ENGLAND
Asaria M, Griffiths I, Campbell R, Kohl
University of York, York, UK
OBJECTIVES: To develop a model of quality adjusted life expectancy (QALE) in England and estimate the social distribution of both mortality and morbidity by socio-economic characteristics such as gender, ethnicity and deprivation. METHODS: The 2011 wave of the Health Survey for England (HSE) is used to model EQ-SD as a function of gender, ethnicity, index of multiple deprivation and other relevant characteristics using appropriate regression techniques to account for the skewness of the EQ-SD distribution. Previous waves of the HSE are used to validate the model. ONS life tables and the ONS longitudinal study data are used to model life expectancy. RESULTS: A multivariate prediction model for QALE as a function of these characteristics. This prediction model is combined with population level aggregate data on the key characteristics to estimate a population level model. This model is a substantial social gradient in the health distribution as represented by QALE in England. The QALE differential between most and least disadvantaged fifths of the social distribution is 12 years, compared with a difference of 5 years in life expectancy. The model predicts that the mortality patterns are not taken into account in the QALE. The QALE prediction model allows us to estimate quality adjusted life expectancy distribution for various subsets of the population, and shows that focusing on life expectancy alone substantially underestimates the degree of health inequality. Our model can be used both for obtaining a more accurate picture of the overall level of health inequality in society and for evaluating the overall impact of population health interventions on health inequality.

PMR155
USING STRUCTURAL EQUATION MODELING TO DETECT RESPONSE SHIFT AND TRUE CHANGE IN HEALTH-RELATED QUALITY-OF-LIFE SCORES OF BREAST CANCER PATIENTS AFTER SURGERY
Nakamura K, Shimozuma K, Suzukii YO, Taira N, Shirohara T, Shibahara H, Saito S
Mitsubishi University, Kusatsu, Japan, 2Tokoh University, Saito, Japan, 3Okayama University Hospital, Okayama, Okayama, Japan, 4National Institute of Public Health, Saita, Japan, 5Okayama University, Okayama, Japan
OBJECTIVES: This study aimed to capture response shift and true change in health-related quality of life (HRQL) scores of breast cancer patients after sur-
ery. METHODS: A data set from a prospective study to identify predictive factors of HRQL (Taira N, Shimozuma K, et al: Breast Cancer Res Treat, 2011) was analyzed, with the exception of the original HRQL questionnaires. The true change (being (EWB) scales of the FACT-G in 191 female breast cancer patients during a two-year postoperative period at (baseline [1 month after surgery]), 6, 12, and 24 months postoperatively. Gt’s structural equation modeling approach was used to investigate three aspects of response shift: (a) a change in the respondent’s internal standards of measurement (i.e., recalibration); (b) a change in the respondent’s importance of values (i.e., re prioritization) and (c) a redefinition of the target con-
struct (i.e., reconceptualization). RESULTS: All three aspects of response shift were observed. Recalibration and re prioritization were occurred in three items of W (‘nauses’, ‘trouble with family’, ‘side effects’). Reconceptualization was observed from FWB to EWB in two items (‘nauses’ and ‘pain’) and from FWB to EWB in two items (‘nauses’ and ‘nervousness’) where change, which define adjust-
ment of response shift, was observed in FWB (the across occasion difference of common factor mean [alpha] = 0.238, P < 0.001) only during first 6 months, and in FWB (alpha = 0.605, P < 0.001) and EWB (alpha = 0.234, P < 0.05) during first 12 months, while observed data analyses indicated statistically significant change in FWB and EWB during first 12 months. CONCLUSIONS: Captured response shifts in this study may contribute to the true change in HRQL as an index of cancer and/or received treatments. These results will help improve reliability of HRQL measurements in a longitudinal study.

PMR156
FACTORIAL INVARiance OF THE WHOQOL-OLD ACROSS GENDER, AGE, AND RESIDENT AREA IN TAIWAN
Kuang-Chih Lee, Chia-Hsun Chen, National Taiwan University (Dept. of Psychology), Taipei, Taiwan
OBJECTIVES: To examine the factor invariance of the WHOQOL-OLD across gender, age, and resident area for the old people in Taiwan. METHODS: Data were collected from 334 people aged 65-75 years (77 aged 65-69, 177 aged 70 to 74, and 177 aged 75 to 99) includ-
ing 177 males and 353 females. 232 aged from 60 to 75 and 279 aged from 76 to 99. 334 live in the southern rural area and 176 live in the northern metropolitan area. To examine the factorial invariance of the WHOQOL-OLD, the sample was divided into two groups on different gender, age, and resident area. First, a baseline six-
ctor model was tested for different gender, age, and resident area respectively. Second, multi-sample analysis was conducted across gender, resident area, and age. RESULTS: The six-factor model was conducted on factor loadings, error variances, and factor variances were imposed. Model comparisons by using Chi-square difference tests were conducted to examine the factor invariance across gender, age, and resident area mathematically. The model revealed that the factor loadings were invar-
ant across different gender, age, and resident area groups respectively. Besides, when imposing equal constraints on the factor loadings, item variances and factor variances of the model fit the data well. The complete factor invariance model was across gender but not age and resident area groups. CONCLUSIONS: This study suggests the underlying factor construct of the WHOQOL-OLD are similar to different degree across different gender, age, and resident area groups. We conclude that the WHOQOL-OLD is a practical measurement tool for different gender, age, and location groups for the old people in Taiwan.

PMR157
A REVIEW OF COGNITIVE INTERVIEWING METHODOLOGIES DURING LINGUISTIC VALIDATION OF CLINICAL OUTCOME ASSESSMENTS (COAS)
Simon M1, Sweeney E2, Moravec H2
1TransPerfect, New York, NY, USA, 2TransPerfect, San Francisco, CA, USA
OBJECTIVES: Per ISPOR and FDA guidelines, conducting cognitive interviews during the linguistic validation of COAS is recommended to increase comprehension and conceptual equivalence between language versions. However, multiple methods are available to conduct cognitive interviews, partially enabled by the increased availability and ease of technology to facilitate the interviews. This poster will review the various methodologies that can be used to conduct cognitive interviews. METHODS: A review of cognitive interview methodologies from past projects as well as potential alternative methods was conducted, including: 1) in-person interviews, 2) telephone interviews, and 3) interviews via video conferencing. Consideration was given to ease of scheduling, cost, and potential difficulties encountered with each method. Each methodology presented pros and cons, including: 1) in-person interviews enable the interviewer to gauge the body language of the respondent, allowing for a deeper form of communication; 2) telephone interviews allow an interviewer to gauge the body language of the respondent, and respondents may not feel comfortable providing feedback over the telephone; 3) interviews via video conferencing may enable easier scheduling of interviews, allow an interviewer to gauge the body language of the respondent, and provide a lower-cost alternative, but the availability of the technology can present challenges in certain regions. CONCLUSIONS: There are various ways of conduct-