AN INVESTIGATION OF FACTORIAL STRUCTURE OF SF-36V2 IN THE US GENERAL POPULATION—THE APPLICATION OF CONFIRMATORY FACTOR ANALYSIS THROUGH STRUCTURAL EQUATION MODELLING
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OBJECTIVES: SF-36 is one of the most popular and extensively used health outcome measures. A large amount of resources have been devoted to examine the psychometric properties of SF-36, such as scale reliability, validity and the use of exploratory factor analysis or principal component analysis to identify the two latent constructs. However, few studies have examined the factor structure of SF-36 developed in Keller’s paper (1997) was adopted as a point of departure for the other models. The model’s goodness of fit to the data was evaluated using a number of fit indices, including CFI, TLI, SRMR, RMSEA, S-Bx2 Statistic and the corrected CFI. All analyses were performed using Mplus 3. RESULTS: Keller’s model provided an adequate fit to the data. However, other models that allowed for error terms of items to covary improved the model fit dramatically. The most interesting finding was that the model that contained only the measurement part performed best. That is, a hierarchic structure did not improve the model fit to the data regardless of the composition of higher order factors. CONCLUSIONS: The results supported the 8 hypothetical factors structure as proposed by the SF-36 developers. However, there were some doubts regarding the higher hierarchic construct of SF-36v2. Consequently, the use of two summary scores should be taken with caution.

CHALLENGES OF TRANSLATING AND LINGUISTICALLY VALIDATING PRO MEASURES INTO SLAVIC LANGUAGES
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OBJECTIVES: The aim of the study was to investigate whether there are common problems that occur when translating (and linguistically validating) PRO measures for use in Slavic countries. METHODS: Past translation projects were selected, which had involved the translation of different PRO measures into two or more Slavic languages. All of the projects employed a standard methodology: 2 forward translations, reconciliation, 2 back translations and back translation review. All of the projects also used linguistic validation interviews with either patients or lay people, depending on the target population, or a clinician review. The documentation of each project was thoroughly examined to identify what the key issues were when translating PRO measures into Slavic languages. RESULTS: Translation issues were mainly linguistic in nature and in most cases were highlighted during the back translation step. Issues included: the omission of articles and possessive pronouns when Slavic languages are back-translated into English; more literal translations are often required to convey figurative ideas in English; Slavic translations cannot always be as concise as the source English and this often leads to the translation being more explanatory in nature; when compared to English, Slavic languages do not have such a wide array of synonymous terms, especially when describing graded emotional states—where English terms do not have a direct [Slavic] equivalent, it is essential to explain the intended meaning of the item in question to ensure that the final translation does not deviate conceptually from the source text. CONCLUSIONS: When translating and linguistically validating PRO measures for use in Slavic countries it is important to be aware of the commonality found between the languages in this language group and to ensure that care is taken to maintain the conceptual equivalence between the source text and the Slavic translation.

INFLUENCE OF DEMOGRAPHIC AND CULTURAL PREDICTORS ON EQ-5D VALUE SET IN THE POLISH POPULATION
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OBJECTIVES: Demographic factors such as age, gender or cultural factors may influence the utility value of health states and interact with health domain impact on utility. The aim of this analysis is to identify factors influencing utility values of EQ-5D and to estimate the relationships between additional variables and utility. METHODS: Data from study valuating EQ-5D with
time trade-off for Polish population were used to evaluate influence of demographic, social and cultural factors on EQ-5D utility value. Based on additional data concerning demographic and lifestyle factors collected, adjusted modeling was performed using GRETl and WinBugs software. Impact of this factors was analyzed by directly including variables in the model, as well as adjusting for variables corresponding interaction between the factors and health domain. RESULTS: Data from 230 interviews (5280 valuations) were analyzed. Preliminary random effects model was developed, with constant and N3 factor, all coefficients statistically significant, R2 equal to 0.37 and value -0.647 for 33,333 health state. After adjusting base model for gender and smoking no influence on utility value was observed. Including the interaction terms between age (0–1 variable defined as above/below median of 38 years) and belief in life after death (defined as strong agreement) with health domains (level 3) proved to be statistically significant and improved model R2 up to 0.40. Direct influence of belief in life after death on the utility value of health states was significant, R2 equal to 0.38 and coefficient value 0.16.

CONCLUSIONS: Demographic and cultural factors influence the utility value of health in Polish population. According to results based on preliminary data belief in life after death significantly reduces utility loss.