

THE INTERNATIONAL ACADEMY OF HEALTH PREFERENCE RESEARCH  
IS PROUD TO ANNOUNCE

## THE 3<sup>RD</sup> MEETING OF THE INTERNATIONAL ACADEMY OF HEALTH PREFERENCE RESEARCH

SUNDAY, OCTOBER 18, 2015  
8:00 AM - 5:30 PM

Chaired by Derek Brown, PhD, Washington University in St. Louis

CHARLES F. KNIGHT EXECUTIVE EDUCATION  
& CONFERENCE CENTER  
AT WASHINGTON UNIVERSITY IN ST. LOUIS  
ONE BROOKINGS DRIVE  
ST. LOUIS, MISSOURI, USA



Held at the Knight Center—located on the grounds of Washington University—this 1-day meeting will provide a forum to discuss innovative developments in the field of health preference research. Chaired by **Derek Brown, PhD**, the meeting will include approximately 13 oral presentations, light breakfast, coffee, lunch, and a business session. All are welcome to **register at: [www.iahpr.org](http://www.iahpr.org)**.

**PRE-MEETING DINNER & STUDENT POSTER SESSION**  
SATURDAY, OCTOBER 17, 2015 – 6:00 TO 11:30 PM



The Pre-Meeting Dinner and Student Poster Session will also be held at the Knight Center and is free for all meeting attendees. The dinner includes a multi-course menu and open bar (no guests, please). The poster session was created as a way to showcase the achievements of students engaged in health preference research. The event includes a free shuttle between the Hyatt Regency and Knight Center. The shuttle schedule will be included in the registration packet.

For more information, visit [www.iahpr.org](http://www.iahpr.org) or email [meeting2015@iahpr.org](mailto:meeting2015@iahpr.org).

# PROGRAM

## Pre-Meeting Dinner & Student Poster Session, Saturday, October 17, 2015 – 6:00 to 11:30 PM

Investigating the Impact of Individual Valuation Block Composition on TTO Estimates

**Andréa Libório Monteiro**<sup>β</sup>

Specialist Training as an Incentive to Retain Doctors in Malawi: A Discrete Choice Experiment

**Kate Mandeville**<sup>β</sup>

Comparison of PROMIS and EQ-5D Quality-Adjusted Life Years

**John D. Hartman**<sup>β</sup>

Stated-Preference Survey Development for Muscular Dystrophy: A Community-Engaged Research Application

**Ilene L. Hollin**<sup>β</sup>

## Meeting, Sunday, October 18, 2015 – 8:00 AM - 5:30 PM

**8:00-8:30 AM**    **Arrival and Light Breakfast**

**8:30-8:45**        **Welcome and Acknowledgement of Sponsors**

**Meeting Chair: Derek Brown**

**8:45-10:15**     **Session 1**

What if You Ask Them Again? Temporal Stability of Choices and Preference Estimates from a DCE

**Jan Ostermann**<sup>α</sup>

Radial versus Femoral Vascular Access Options in Coronary Angiography and Intervention

**Janine van Til**

Willingness-to-Pay for Health: A Fuzzy Approach to Modelling Preferences and Choice Functions

**Michał Jakubczyk**

Best-Worst Scaling Works with Virtually Everyone. Except Kids

**Terry Nicholas Flynn**<sup>α</sup>

**10:15-10:30**    **Coffee Break**

**10:30-12:00 PM** **Session 2**

Use of Best-Worst Scaling to Assess Patient Perceptions of Refractory Overactive Bladder Treatments

**Kathleen Marie Beusterien**<sup>α</sup>

Valuing New HRQOL Measures: A DCE Application for Adverse Childhood Experiences and Maltreatment

**Derek Brown**<sup>α</sup>

The Effect of Framing of Death on Health State Values Obtained from Discrete Choice Experiments

**Marcel Jonker**

Framing of Attribute's Levels: Influence on the Interpretation of Outcomes from a BWS Experiment

**Marieke Weernink**<sup>β</sup>

**12:00-1:00**     **Lunch**

**1:00-2:30**       **Session 3**

Attribute Non-Attendance and Time Pressure in Discrete Choice Experiments: An Eye-Tracking Study

**Kate Mandeville**<sup>β</sup>

Respondent Cognition in Health Preference Research

**Shannon K. Runge**<sup>β</sup>

Mitigating Hypothetical Bias in Stated Preference Discrete Choice Experiments

**Dean A. Regier**<sup>α</sup>

Discount Rate Assessment among Adults Experiencing Dyspnea from Common Primary Care Diseases

**Irene D. Fischer**

**2:30-2:45**       **Coffee Break**

**2:45-3:45**       **Session 4**

Conjoint Analysis: A Tool for Understanding Patients Decisions for Invasive Treatments

**Tracy Kuo Lin**

Open Discussion

**Derek Brown**

**4:00-5:30**       **Business Meeting (All attendees are welcome)**

<sup>α</sup> indicates a member presenter

<sup>β</sup> indicates a student presenter

**Results:** The DCE was administered to a Dutch nationally representative sample of 1200 respondents equally divided over the 4 study arms. The estimation results revealed substantial framing effects. While the DCE death approach classified just 8% of the health states as worse than death, much higher percentages were found in the other arms: 28% (duration), 57% (LT-death) and 81% (LT-duration). Relative distances between health states on the latent scale were not affected by adding LT, but anchoring on death altered the values. We observed less dispersion for mild to moderate states, and a more stretched distribution for severe states.

**Conclusions:** Estimation results were substantially altered by the framing of death as explicit or implicit, and immediate or postponed. These framing effects may help to explain the commonly observed discrepancies between values derived using Time Trade Off and the popular DCE duration approach. While one may argue against the use of a death alternative in DCE tasks for health state valuation on basis of theoretical and statistical considerations, it would seem to be an essential component for those who aim to reconcile DCE and TTO results.

### **Framing of Attribute's Levels: Influence on the Interpretation of Outcomes from a BWS Experiment.**

**Marieke Weernink, MSc; Karin Groothuis-Oudshoorn, PhD; Maarten IJzerman, PhD; and Janine van Til, PhD, University of Twente**

**Purpose:** In a previous study, a Best-Worst Scaling case 2 (BWS) was conducted to elicit treatment preferences for symptom control, side-effects, and process characteristics of various treatments prescribed in Parkinson's Disease. It is known that people, especially elderly, have trouble interpreting risks. Therefore it was decided to decrease the cognitive load by using a qualitative operationalization of the levels of symptoms and side-effects. The disadvantage of this strategy was that patients might have different perceptions of risks occurring "seldom to never, sometimes or often". Our objective was to study whether this operationalization influenced the interpretation and valuation of outcomes of our BWS experiment.

**Methods:** A post-questionnaire was distributed among 30 patients who participated in the BWS-study. Patients were asked to qualitatively state their perception of the extent to which they suffered from the symptoms and side-effects of treatment: tremors, posture and balance problems, slowness of movement, dizziness, fatigue, and dyskinesia. Subsequently, they were asked to quantify this extent, as well as their (quantified) perception of the other two levels. In analysis, patients were grouped based on their experienced suffering state per attribute, medians were estimated, and a perceived duration range for each attribute was estimated. Beside, an actual duration range for each attribute was estimated based on the data of the experienced states. Based on these results, subgroup analyses of our original BWS data were performed to study whether the experienced amount of suffering from an attribute influenced attribute importance.

**Results:** The 30 patients indicated a wide range of perceived severity of symptoms and side-effects of treatment. For each symptom or side-effect, we included patients that perceived their extent as "seldom", "sometimes" or "often". Interestingly, when asked to quantify the extent of suffering, the perceived impact of suffering from a symptom (within respondent) is smaller than the actual range (between respondents). The perceived burden of a symptom or side-effect is underestimated most by patients that seldom to never suffer from an attribute with a factor ranging from 1.5 - 8 for the different attributes. This underestimation was also present for patients who sometimes or often suffered from an attribute, but was much smaller: ranging from 1.1 - 1.6. BWS subgroup analysis on the original data showed that patients who seldom suffer from a symptom assigned a lower importance to that symptom compared to patients who often suffer from it, indicating that this underestimation is present in the original data as well. These differences ranged from 2% for posture and balance problems to 11% for the suffering of dyskinesia (between seldom to never and often suffer from).

**Conclusions:** The qualitative operationalization of attribute levels resulted in different interpretations between the subjects and influenced BWS results. Patients who only have minor complaints from a symptom or side-effect, seem to underestimate the actual burden of having major complaints. As a result,

patients assigned a lower attribute importance to attributes from which they only seldom to never suffer from and a higher attribute importance to attributes from which they often suffer from.

1:00-2:30 PM

### Session 3

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#### Attribute Non-Attendance and Time Pressure in Discrete Choice Experiments: An Eye-Tracking Study

**Benjamin Cooper**, City University London; **Kate, Mandeville, BSc, MBBS, MSc**, London School of Hygiene & Tropical Medicine; **Kielan Yarrow, BSc, MSc, PhD**, City University London

**Purpose:** To investigate attribute non-attendance in a discrete choice experiment under different time conditions using eye-tracking

**Methods:** The design of the discrete choice experiment was based on an existing study examining preferences for primary care appointments. 48 participants completed 25 choice tasks (24 novel and 1 repeated) whilst having their eye movements recorded by an eye-tracking camera. Participants were divided into two groups: self-paced or computer-paced. The first group were able to progress at their own rate, whereas the second were forced to wait 25 seconds before being able to make a choice and move on to the next task. The outcome measure was time spent looking at different attributes, particularly the attributes on which the participants spent the most and least attention.

**Results:** There was a significant difference in time spent looking at different attributes between the two groups. The computer-paced group spent significantly longer looking at their most and least attended attributes in all choice tasks compared to the self-paced group. The self-paced group spent significantly less time looking at their most and least attended attributes as the experiment progressed, with some participants spending no time on certain attributes. In contrast, computer-paced participants spent approximately the same amount of time looking at their most attended attribute throughout the experiment. However, they also spent less time looking at their least attended attribute as the experiment progressed.

**Conclusions:** Attribute non-attendance was confirmed through the use of eye-tracking, suggesting the use of decision heuristics. The use of a time condition may discourage the use of such heuristics in discrete choice experiments.

#### Respondent Cognition in Health Preference Research

**Benjamin M. Craig, PhD**, Moffitt Cancer Center and University of South Florida; **Shannon K. Runge, MA**, University of South Florida and Moffitt Cancer Center

**Purpose:** Recent studies have emphasized the need to better understand the cognitive burden of discrete choice experiments (e.g., eye-tracking) to improve their design. Yet, no health preference study has directly incorporated a cognitive assessment, such as a memory test, to assess (1) whether those with lower cognition respond more randomly or (2) whether those who experience greater cognitive decline respond more randomly.

**Methods:** As a measure of episodic memory, the immediate and delayed word recall tasks from the US Health and Retirement Study (HRS) were adapted for inclusion in the Women's Health Valuation (WHV) study. Between the 2 recall tasks, the survey asked respondents (women, ages 40 to 69) to complete 30 paired comparisons, each with two menopausal symptoms described using the Patient-Reported Outcomes Version of the Common Terminology Criteria for Adverse Events (PRO-CTCAE) and the question, "Which do you prefer?" As a measure of randomness, the root likelihood was introduced as the geometric mean of a response pattern that can be rescaled at the respondent-level, such that 0 represents random response and 1 represents always giving the majority response. This study tests the association between a respondent's self-reported memory, word recall and her root likelihood.

**Results:** Among the 3397 respondents, self-reported memory ranged from Excellent to Poor (Excellent/VeryGood/Good: 88%; Fair/Poor: 12%), immediate word recall ranged from 0 and 10 (mean 7.24; IQR 6-8), the difference between immediate and delayed recall ranged from 0 to 9 (mean 1.15; IQR 0-2), and