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Mind the gap : explanations for the differences in utilities between respondent groups

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References

- [1] GGD rivierenland. Bofvirus in aantal nederlandse studentensteden, 2010.
- [2] InfoNu.nl. Arthrose: Nieuwe kraakbeentransplantatietechniek, 2010.
- [3] M.F. Drummond, G.L. Stoddart, and G.W. Torrance. Critical assessment of economic evaluation. In *Methods for the Economic Evaluation of Health Care Programmes*, number 3, pages 18–38. Oxford Medical publications, Oxford, 1990.
- [4] A.M. Stiggelbout and J.C. de Haes. Patient preference for cancer therapy: an overview of measurement approaches. *Journal of Clinical Oncology*, 19(1):220–230, January 2001.
- [5] C. Harries and A.M. Stiggelbout. Approaches to measuring patients’ decision-making. In Ebrahim S.(eds.) Bowling, A., editor, *Handbook of Health Research Methods: Investigation, Measurement and Analysis.*, number 16, pages 362–393. Open University/McGraw Hill, Maidenhead, 2005.
- [6] Morgenstern O. Neumann J.von. *Theory of games and economic behavior (First Edition ed.)*. Princeton: Princeton University Press, 1947.
- [7] G.W. Torrance. Social preferences for health states - empirical evaluation of 3 measurement techniques. *Socio-Economic Planning Sciences*, 10(3):129–136, 1976.
- [8] P. Wakker and A.M. Stiggelbout. Explaining distortions in utility elicitation through the rank-dependent model for risky choices. *Medical Decision Making*, 15(2):180–186, April 1995.
- [9] H. Bleichrodt. A new explanation for the difference between time trade-off utilities and standard gamble utilities. *Health Economics*, 11(5):447–456, July 2002.
- [10] E. Nord. Methods for quality adjustment of life years. *Social Science & Medicine*, 34(5):559–569, March 1992.
- [11] P. Dolan. Modeling valuations for euroqol health states. *Medical Care*, 35(11):1095–1108, November 1997.
- [12] M.R. Gold, J.E. Siegel, L.B. Russell, and M.C. Weinstein. *Cost-effectiveness in health and medicine*. Oxford University Press Inc., New York, 1996.

- [13] Luijn JCF Wolff I, Riteco JA, Heij LJMD. Richtlijnen voor farmaco-economisch onderzoek. rapport uigebracht aan de minister van volksgezondheid, welzijn en sport. amstelveen. Technical report, College voor Zorgverzekeringen, 1999.
- [14] National Institute for Clinical Excellence. Guide to the methods of technology appraisal. Technical report, NICE, 2004.
- [15] A.M. Stiggelbout and E. Vogel-Voogt. Health state utilities: A framework for studying the gap between the imagined and the real. *Value in Health*, 11(1):76–87, January 2008.
- [16] G.A. De Wit, J.J.V. Busschbach, and F.T. De Charro. Sensitivity and perspective in the valuation of health status: Whose values count? *Health Economics*, 9(2):109–126, March 2000.
- [17] P. Dolan. Whose preferences count? *Medical Decision Making*, 19(4):482–486, October 1999.
- [18] P.A. Ubel, G. Loewenstein, and C. Jepsen. Whose quality of life? a commentary exploring discrepancies between health state evaluations of patients and the general public. *Quality of Life Research*, 12(6):599–607, September 2003.
- [19] D. Kahneman and A.B. Krueger. Developments in the measurement of subjective well-being. *Journal of Economic Perspectives*, 20(1):3–24, 2006.
- [20] S.J. Jansen, A.M. Stiggelbout, P.P. Wakker, M.A. Nooij, E.M. Noordijk, and J. Kievit. Unstable preferences: a shift in valuation or an effect of the elicitation procedure? *Medical Decision Making*, 20(1):62–71, January 2000.
- [21] J. Horsman, W. Furlong, D. Feeny, and G. Torrance. The health utilities index (hui(r)): concepts, measurement properties and applications. *Health and Quality of Life Outcomes*, 1 (54)(1):–, October 2003.
- [22] P. Dolan, C. Gudex, P. Kind, and A. Williams. A social tariff for euroqol: Results from a uk general population survey. Technical report, York, York, 1995.
- [23] R.P. Insinga and D.G. Fryback. Understanding differences between self-ratings and population ratings for health in the euroqol. *Quality of Life Research*, 12(6):611–619, September 2003.

- [24] P.A. Ubel, G. Loewenstein, and C. Jepson. Disability and sunshine: can hedonic predictions be improved by drawing attention to focusing illusions or emotional adaptation? *Journal of Experimental Psychology Applied*, 11(2):111–123, June 2005.
- [25] P.A. Ubel, G. Loewenstein, J. Hershey, J. Baron, T. Mohr, D.A. Asch, and C. Jepson. Do nonpatients underestimate the quality of life associated with chronic health conditions because of a focusing illusion? *Medical Decision Making*, 21(3):190–199, May 2001.
- [26] D.T. Gilbert, E.C. Pinel, T.D. Wilson, S.J. Blumberg, and T.P. Wheatley. Immune neglect: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, 75(3):617–638, September 1998.
- [27] T.D. Wilson, T. Wheatley, J.M. Meyers, D.T. Gilbert, and D. Axsom. Focalism: A source of durability bias in affective forecasting. *Journal of Personality and Social Psychology*, 78(5):821–836, May 2000.
- [28] M.F. Luce. Decision making as coping. *Health Psychology*, 24(4):S23–S28, July 2005.
- [29] G. Salkeld, M. Ryan, and L. Short. The veil of experience. do consumers prefer what they know best? *Health Economics*, 9(3):267–270, April 2000.
- [30] Tversky A. and Kahneman D. Loss aversion in riskless choice: a reference-dependent model. *The Quarterly Journal of Economics*, 106(4):1039–1061, 1991.
- [31] S. Frederick and G. Loewenstein. Hedonic adaptation. In D. Kahneman, E. Diener, and N. Schwarz, editors, *Well-Being The foundations of hedonic psychology*, number 16, pages 302–329. Russell sage Foundation, New York, 1999.
- [32] S.E. Taylor. Adjustment to threatening events - a theory of cognitive adaptation. *American Psychologist*, 38(11):1161–1173, 1983.
- [33] P. Brickman, D. Coates, and R. Janoffbulman. Lottery winners and accident victims - is happiness relative. *Journal of Personality and Social Psychology*, 36(8):917–927, 1978.
- [34] E. Diener, R.E. Lucas, and C.N. Scollon. Beyond the hedonic treadmill - revising the adaptation theory of well-being. *American Psychologist*, 61(4):305–314, May 2006.

- [35] P.A. Ubel. *You're stronger than you think*, volume 1. The McGraw-Hill companies, New York, 2006.
- [36] P. Dolan and D. Kahneman. Interpretations of utility and their implications for the valuation of health. *Economic Journal*, 118(525):215–234, January 2008.
- [37] P.A. Ubel, G. Loewenstein, N. Schwarz, and D.M. Smith. Misimagining the unimaginable: The disability paradox and health care decision making. *Health Psychology*, 24(4):S57–S62, July 2005.
- [38] L.J. Damschroder, B.J. Zikmund-Fisher, and P.A. Ubel. The impact of considering adaptation in health state valuation. *Social Science & Medicine*, 61(2):267–277, July 2005.
- [39] L.J. Damschroder, B.J. Zikmund-Fisher, and P.A. Ubel. Considering adaptation in preference elicitations. *Health Psychology*, 27(3):394–399, May 2008.
- [40] P. Dolan. The effect of experience of illness on health state valuations. *Journal of Clinical Epidemiology*, 49(5):551–564, May 1996.
- [41] M.A. Sprangers and C.E. Schwartz. Integrating response shift into health-related quality of life research: a theoretical model. *Social Science & Medicine*, 48(11):1507–1515, June 1999.
- [42] M. Ross. Relation of implicit theories to the construction of personal histories. *Psychological Review*, 96(2):341–357, April 1989.
- [43] H.P. Lacey, D. Smith, and P.A. Ubel. Hope i die before i get old: mispredicting happiness across the adult lifespan. *Journal of Happiness Studies*, 7:167–182, 2006.
- [44] M.G.T. Dolders, M.P.A. Zeegers, W. Groot, and A. Ament. A meta-analysis demonstrates no significant differences between patient and population preferences. *Journal of Clinical Epidemiology*, 59(7):653–664, July 2006.
- [45] S.E. Taylor, M.E. Kemeny, G.M. Reed, J.E. Bower, and T.L. Gruenewald. Psychological resources, positive illusions, and health. *American Psychologist*, 55(1):99–109, January 2000.
- [46] K.E. Bremner, C.A. Chong, G. Tomlinson, S.M. Alibhai, and M.D. Krahn. A review and meta-analysis of prostate cancer utilities. *Medical Decision Making*, 27(3):288–298, May 2007.

- [47] D. Feeny, W. Furlong, G.W. Torrance, C.H. Goldsmith, Z. Zhu, S. De-Pauw, M. Denton, and M. Boyle. Multiattribute and single-attribute utility functions for the health utilities index mark 3 system. *Medical Care*, 40(2):113–128, February 2002.
- [48] M.W. Lipsey and D.B. Wilson. *Practical meta-analysis*. Number 49. Sage Publications, Inc, California, 2001.
- [49] D. Smith, R.L. Sherriff, L. Damschroder, G. Loewenstein, and P.A. Ubel. Misremembering colostomies? former patients give lower utility ratings than do current patients. *Health Psychology*, 25(6):688–695, November 2006.
- [50] J.E Hunter and F.L. Schmidt. *Methods of meta-analysis correcting error and bias in research findings*. Newbury Park, CA: Sage, 1990.
- [51] M. Borenstein, L. Hedges, J. Higgins, and H. Rothstein. *Comprehensive meta analysis*, 2007.
- [52] L.V. Hedges and I. Olkin. *Statistical methods for meta-analysis*. Academic Press, Orlando, FL, 1985.
- [53] S. Duval and R. Tweedie. A nonparametric "trim and fill" method of accounting for publication bias in meta-analysis. *Journal of the American Statistical Association*, 95(449):89–98, March 2000.
- [54] A.S. Elstein and G.B. Chapman. Patients' values and clinical substituted judgments: The case of localized prostate cancer. *Health Psychology*, 24(4):S85–S92, July 2005.
- [55] J.F. O'Leary, D.L. Fairclough, M.K. Jankowski, and J.C. Weeks. Comparison of time-tradeoff utilities and rating scale values of cancer patients and their relatives: evidence for a possible plateau relationship. *Medical Decision Making*, 15(2):132–137, April 1995.
- [56] E.A. Calhoun, C.L. Bennett, P.A. Peeples, J.R. Lurain, P.Y. Roland, J.M. Weinstein, and D.A. Fishman. Perceptions of cisplatin-related toxicity among ovarian cancer patients and gynecologic oncologists. *Gynecologic Oncology*, 71(3):369–375, December 1998.
- [57] M. Happich and B. Mazurek. Priorities and prospect theory. *European Journal of Health Economics*, 3(1):40–46, 2002.
- [58] X. Badia, M. Herdman, and P. Kind. The influence of ill-health experience on the valuation of health. *Pharmacoeconomics*, 13(6):687–696, June 1998.

- [59] X. Badia, A. Diaz-Prieto, M. Rue, and D.L. Patrick. Measuring health and health state preferences among critically ill patients. *Intensive Care Medicine*, 22(12):1379–1384, December 1996.
- [60] J.H. Goldberg. Being there is important, but getting there matters too: the role of path in the valuation process. *Medical Decision Making*, 26(4):323–337, July 2006.
- [61] S. Hallan, A. Asberg, B. Indredavik, and T.E. Wideroe. Quality of life after cerebrovascular stroke: a systematic study of patients' preferences for different functional outcomes. *Journal of Internal Medicine*, 246(3):309–316, September 1999.
- [62] V.S. Naraine, N.A. Risebrough, P. Oh, V.S. Blanchette, S. Lee, A.M. Stain, D. Hedden, J.M. Teitel, and B.M. Feldman. Health-related quality-of-life treatments for severe haemophilia: utility measurements using the standard gamble technique. *Haemophilia*, 8(2):112–120, March 2002.
- [63] S.T. Stewart, L. Lenert, V. Bhatnagar, and R.M. Kaplan. Utilities for prostate cancer health states in men aged 60 and older. *Medical Care*, 43(4):347–355, April 2005.
- [64] A.N.A. Tosteson, S.E. Gabriel, T.S. Kneeland, M.M. Moncur, P.D. Manganiello, I. Schiff, B. Ettinger, and L.J. Melton. Has the impact of hormone replacement therapy on health-related quality of life been undervalued? *Journal of Womens Health & Gender-Based Medicine*, 9(2):119–130, March 2000.
- [65] J. Hall, K. Gerard, G. Salkeld, and J. Richardson. A cost utility analysis of mammography screening in australia. *Social Science & Medicine*, 34(9):993–1004, May 1992.
- [66] M.E. Suarez-Almazor and B. Conner-Spady. Rating of arthritis health states by patients, physicians, and the general public. implications for cost-utility analyses. *Journal of Rheumatology*, 28(3):648–656, March 2001.
- [67] M.E. Suarez-Almazor, B. Conner-Spady, C.J. Kendall, A.S. Russell, and K. Skeith. Lack of congruence in the ratings of patients' health status by patients and their physicians. *Medical Decision Making*, 21(2):113–121, March 2001.

- [68] J.A. Hayman, D.L. Fairclough, J.R. Harris, and J.C. Weeks. Patient preferences concerning the trade-off between the risks and benefits of routine radiation therapy after conservative surgery for early-stage breast cancer. *Journal of Clinical Oncology*, 15(3):1252–1260, March 1997.
- [69] J.A. Hayman, M.U. Kabeto, M.J. Schipper, J.E. Bennett, F.A. Vicini, and L.J. Pierce. Assessing the benefit of radiation therapy after breast-conserving surgery for ductal carcinoma-in-situ. *Journal of Clinical Oncology*, 23(22):5171–5177, August 2005.
- [70] A.E. Molzahn, H.C. Northcott, and J.B. Dossetor. Quality of life of individuals with end stage renal disease: perceptions of patients, nurses, and physicians. *Annals Journal*, 24(3):325–333, June 1997.
- [71] V.R. Grann, J.S. Jacobson, V. Sundararajan, S.M. Albert, A.B. Troxel, and A.I. Neugut. The quality of life associated with prophylactic treatments for women with brca1/2 mutations. *Cancer Journal From Scientific American*, 5(5):283–292, September 1999.
- [72] L.A. Prosser, K.M. Kuntz, A. Bar-Or, and M.C. Weinstein. Patient and community preferences for treatments and health states in multiple sclerosis. *Multiple Sclerosis*, 9(3):311–319, June 2003.
- [73] S.J. Cunningham and N.P. Hunt. A comparison of health state utilities for dentofacial deformity as derived from patients and members of the general public. *European Journal of Orthodontics*, 22(3):335–342, June 2000.
- [74] J. Vanderdonk, P.C. Levendag, A.J. Kuijpers, F.H.J. Roest, J.D.F. Habbema, C.A. Meeuwis, and P.I.M. Schmitz. Patient participation in clinical decision-making for treatment of t3 laryngeal-cancer - a comparison of state and process utilities. *Journal of Clinical Oncology*, 13(9):2369–2378, September 1995.
- [75] M. Happich and T. von Lengerke. Valuing the health state 'tinnitus': Differences between patients and the general public. *Hearing Research*, 207(1-2):50–58, September 2005.
- [76] S.E. Gabriel, T.S. Kneeland, L.J. Melton, M.M. Moncur, B. Ettinger, and A.N.A. Tosteson. Health-related quality of life in economic evaluations for osteoporosis: Whose values should we use? *Medical Decision Making*, 19(2):141–148, April 1999.

- [77] M. Cappelli, L. Surh, L. Humphreys, S. Verma, D. Logan, A. Hunter, and J. Allanson. Measuring women's preferences for breast cancer treatments and brca1/brca2 testing. *Quality of Life Research*, 10(7):595–607, 2001.
- [78] S. Chen, A. Shaheen, and A. Garber. Cost-effectiveness and cost-benefit analysis of using methotrexate vs goeckerman therapy for psoriasis. a pilot study. *Archives of Dermatology*, 134(12):1602–1608, December 1998.
- [79] J. Ashby, M. Ohanlon, and M.J. Buxton. The time trade-off technique - how do the valuations of breast-cancer patients compare to those of other groups. *Quality of Life Research*, 3(4):257–265, August 1994.
- [80] J. Soucek, M.M. Byrne, P.A. Kelly, K. O' Malley, M. Richardson, C. Pak, H. Nelson, and M.E. Suarez-Almazor. Valuation of arthritis health states across ethnic groups and between patients and community members. *MedicalCare*, 43(9):921–928, September 2005.
- [81] I.J. Korfage, H.J. de Koning, J.D.F. Habbema, F.H. Schroder, and M.L. Essink-Bot. Side-effects of treatment for localized prostate cancer: are they valued differently by patients and healthy controls? *British Journal of Urological International*, 99(4):801–806, April 2007.
- [82] E.A. Calhoun, D.A. Fishman, J.R. Lurain, E.E. Welshman, and C.L. Bennett. A comparison of ovarian cancer treatments: analysis of utility assessments of ovarian cancer patients, at-risk population, general population, and physicians. *Gynecologic Oncology*, 93(1):164–169, April 2004.
- [83] C.D. Wells, W.B. Murrill, and M.R. Arguedas. Comparison of health-related quality of life preferences between physicians and cirrhotic patients: Implications for cost-utility analyses in chronic liver disease. *Digestive Diseases and Sciences*, 49(3):453–458, March 2004.
- [84] A.E. Clarke, M.K. Goldstein, D. Michelson, A.M. Garber, and L.A. Lenert. The effect of assessment method and respondent population on utilities elicited for gaucher disease. *Quality of Life Research*, 6(2):169–184, March 1997.
- [85] D.L. Sackett and G.W. Torrance. The utility of different health states as perceived by the general public. *Journal of Chronic Diseases*, 31(11):697–704, 1978.
- [86] S.M. van Osch. *Construction of TTO utilities*. PhD thesis, Leiden University, 2007.

- [87] R. Bender, C. Bunce, M. Clarke, S. Gates, S. Lange, N.L. Pace, and K. Thorlund. Attention should be given to multiplicity issues in systematic reviews. *Journal of Clinical Epidemiology*, 61(9):857–865, September 2008.
- [88] D. Polsky, R.J. Willke, K. Scott, K.A. Schulman, and H.A. Glick. A comparison of scoring weights for the euroqol (c) derived from patients and the general public. *Health Economics*, 10(1):27–37, January 2001.
- [89] R. Brooks. Euroqol: The current state of play. *Health Policy*, 37(1):53–72, July 1996.
- [90] L.S. Matza, K.S. Boye, N. Yurgin, J. Brewster-Jordan, S. Mannix, J.M. Shorr, and B.L. Barber. Utilities and disutilities for type 2 diabetes treatment-related attributes. *Quality of Life Research*, 16(7):1251–1265, September 2007.
- [91] H.A. Llewellyn-Thomas, E.C. Thiel, and M.J. McGreal. Cancer patients’ evaluations of their current health states: the influences of expectations, comparisons, actual health status, and mood. *Medical Decision Making*, 12(2):115–122, April 1992.
- [92] M. Hagedoorn, S.G. Uijl, E. Van Sonderen, A.V. Ranchor, B.M.F. Grol, R. Otter, B. Krol, W. Van den Heuvel, and R. Sanderman. Structure and reliability of ware’s patient satisfaction questionnaire iii - patients’ satisfaction with oncological care in the netherlands. *Medical Care*, 41(2):254–263, February 2003.
- [93] M. Rosenberg. *Society and the Adolescent Self-Image.*, volume Revised edition. CT: Wesleyan University Press, Middletown, 1989.
- [94] Ci3. Ci3 skimsoftware division rotterdam. Technical report, Sawtooth-Software, USA, 2000.
- [95] J.F. Fries, P. Spitz, R.G. Kraines, and H.R. Holman. Measurement of patient outcome in arthritis. *Arthritis and Rheumatism*, 23(2):137–145, 1980.
- [96] H.P. Lacey, A. Fagerlin, G. Loewenstein, D. Smith, J. Riis, and P.A. Ubel. It must be awful for them: Perspective and task context affects ratings for health conditions. *Judgement and Decision Making*, 1(2):146–152, 2007.

- [97] S.J. Walters and J.E. Brazier. Comparison of the minimally important difference for two health state utility measures: Eq-5d and sf-6d. *Quality of Life Research*, 14(6):1523–1532, August 2005.
- [98] D.C. Hadorn. The role of public values in setting health-care priorities. *Social Science & Medicine*, 32(7):773–781, 1991.
- [99] D.G. Froberg and R.L. Kane. Methodology for measuring health-state preferences .3. population and context effects. *Journal of Clinical Epidemiology*, 42(6):585–592, 1989.
- [100] Y. Peeters and A.M. Stiggelbout. Health state valuations of patients and the general public analytically compared: A meta-analytical comparison of patient and population health state utilities. *Value in Health*, 13(2):306–309, March 2010.
- [101] M.F. Janssen, E. Birnie, J.A. Haagsma, and G.J. Bonsel. Comparing the standard eq-5d three-level system with a five-level version. *Value in Health*, 11(2):275–284, March 2008.
- [102] P.F. Krabbe, M.E. Stouthard, M.L. Essink-Bot, and G.J. Bonsel. The effect of adding a cognitive dimension to the euroqol multiattribute health-status classification system. *Journal of Clinical Epidemiology*, 52(4):293–301, April 1999.
- [103] R.A. Carr-Hill. Health related quality of life measurement—euro style. *Health Policy*, 20(3):321–328, 1992.
- [104] C. Gudex. Are we lacking a dimensions of energy in the euroqol instrument? In S. Bjork, editor, *EuroQol conference proceedings: Lund October 1991*, number 6, pages 61–81. The Swedish Institute for Health Economics, Lund, 1992.
- [105] The EuroQol Group. Euroqol—a new facility for the measurement of health-related quality of life. the euroqol group. *Health Policy*, 16(3):199–208, December 1990.
- [106] Rigby AS. Statistical methods in epidemiology. v. towards an understanding of the kappa coefficient. *Disability and Rehabilitation 2000 May 20;22(8):339-344.*, 22(8):339–344, 2000.
- [107] J. Riis, G. Loewenstein, J. Baron, and C. Jepson. Ignorance of hedonic adaptation to hemodialysis: A study using ecological momentary assessment. *Journal of Experimental Psychology-General*, 134(1):3–9, February 2005.

- [108] N.D. Weinstein. Unrealistic optimism about future life events. *Journal of Personality and Social Psychology*, 39(5):806–820, 1980.
- [109] M.C. Lennon, B.P. Dohrenwend, A.J. Zautra, and J.J. Marbach. Coping and adaptation to facial pain in contrast to other stressful life events. *Journal of Personality and Social Psychology*, 59(5):1040–1050, November 1990.
- [110] Hilgard ER Ruch JC Lange AF Lenox JR Morgan AH and Sachs LB. The psychophysics of cold pressor pain and its modification through hypnotic suggestion. *American Journal of Psychology*, 87:93–105, 1974.
- [111] N. Schwarz. Self-reports - how the questions shape the answers. *American Psychologist*, 54(2):93–105, February 1999.
- [112] D. M. Smith, N. Schwarz, T.R. Roberts, and P.A. Ubel. Why are you calling me? how study introductions change response patterns. *Quality of Life Research*, 15(4):621–630, May 2006.
- [113] Centraal Bureau voor de Statistiek. Zelfgerapporteerde medische consumptie, gezondheid en leefstijl. Technical report, CBS, 2010.
- [114] P.F.M. Stalmeier, M.K. Goldstein, A.M. Holmes, L. Lenert, J. Miyamoto, A.M. Stiggelbout, G.W. Torrance, and J. Tsevat. What should be reported in a methods section on utility assessment? *Medical Decision Making*, 21(3):200–207, May 2001.
- [115] Y. Peeters and A.M. Stiggelbout. Valuing health: does enriching a scenario lead to higher utilities? *Medical Decision Making*, 29(3):334–342, May 2009.
- [116] N.F. Boyd, H.J. Sutherland, K.Z. Heasman, D.L. Tritchler, and B.J. Cummings. Whose utilities for decision-analysis. *Medical Decision Making*, 10(1):58–67, January 1990.
- [117] Centraal Bureau voor de Statistiek CBS. Overlevingstafels naar leeftijd en geslacht 2005. Technical report, Centraal Bureau voor de Statistiek, September 2007.
- [118] M.L. Essink-Bot. Beschrijvend kwaliteit van leven-onderzoek. In M.P.M.H. Rutten-van Molken, J.J.V. Busschbach, and F.F.H. Rutten, editors, *Van Kosten tot Effecten*, number Hoofdstuk 5, pages 63–72. Elsevier gezondheidszorg, Maarsen, 2000.

- [119] J. Tsevat. What do utilities measure? *Medical Care*, 38(9):160–164, September 2000.
- [120] R. Arnold. *Quality of life in chronic obstructive pulmonary disease and chronic heart failure*. PhD thesis, Rijksuniversiteit Groningen, 2004.
- [121] R.E. Lucas. Adaptation and the set-point model of subjective well-being - does happiness change after major life events? *Current Directions in Psychological Science*, 16(2):75–79, April 2007.
- [122] J.E. Sherman, D.J. DeVinney, and K.B. Sperling. Social support and adjustment after spinal cord injury: Influence of past peer-mentoring experiences and current live-in partner. *Rehabilitation Psychology*, 49(2):140–149, May 2004.
- [123] E. Martz, H. Livneh, M. Priebe, L.A. Wuermsler, and L. Ottomanelli. Predictors of psychosocial adaptation among people with spinal cord injury or disorder. *Archives of Physical Medicine and Rehabilitation*, 86(6):1182–1192, June 2005.
- [124] J.R. Rodrigue, W.F. Kanasky Jr, S.I. Jackson, and M.G. Perri. The psychosocial adjustment to illness scale—self-report: factor structure and item stability. *Psychology Assessments*, 12(4):409–413, December 2000.
- [125] V.S. Helgeson and H.L. Fritz. Cognitive adaptation as a predictor of new coronary events after percutaneous transluminal coronary angioplasty. *Psychosomatic Medicine*, 61(4):488–495, July 1999.
- [126] V.S. Helgeson. Applicability of cognitive adaptation theory to predicting adjustment to heart disease after coronary angioplasty. *Health Psychology*, 18(6):561–569, November 1999.
- [127] I.W.S. Chan, J.C.L. Lai, and K.W.N. Wong. Resilience is associated with better recovery in chinese people diagnosed with coronary heart disease. *Psychology & Health*, 21(3):335–349, June 2006.
- [128] T. Moore, P. Norman, P.R. Harris, and M. Makris. Cognitive appraisals and psychological distress following venous thromboembolic disease: An application of the theory of cognitive adaptation. *Social Science & Medicine*, 63(9):2395–2406, November 2006.
- [129] H.E. Stiegelis, M. Hagedoorn, R. Sanderman, K.I. van der Zee, B.R. Buunk, and M.C.M. van den Bergh. Cognitive adaptation: A comparison of cancer patients and healthy references. *British Journal of Health Psychology*, 8:303–318, September 2003.

- [130] V.S. Helgeson. Cognitive adaptation, psychological adjustment, and disease progression among angioplasty patients: 4 years later. *Health Psychology*, 22(1):30–38, January 2003.
- [131] J.R. Ickovics, S. Milan, R. Boland, E. Schoenbaum, P. Schuman, and D. Vlahov. Psychological resources protect health: 5-year survival and immune function among hiv-infected women from four us cities. *Aids*, 20(14):1851–1860, September 2006.
- [132] C.F. Ratelle, R.J. Vallerand, Y. Chantal, and P. Provencher. Cognitive adaptation and mental health: A motivational analysis. *European Journal of Social Psychology*, 34(4):459–476, July 2004.
- [133] B. Major, C. Richards, M.L. Cooper, C. Cozzarelli, and J. Zubek. Personal resilience, cognitive appraisals, and coping: An integrative model of adjustment to abortion. *Journal of Personality and Social Psychology*, 74(3):735–752, March 1998.
- [134] P.L. Tomich and V.S. Helgeson. Cognitive adaptation theory and breast cancer recurrence: Are there limits? *Journal of Consulting and Clinical Psychology*, 74(5):980–987, October 2006.
- [135] J.D. Creswell, W.T. Welch, S.E. Taylor, D.K. Sherman, T.L. Gruenewald, and T. Mann. Affirmation of personal values buffers neuroendocrine and psychological stress responses. *Psychological Science*, 16(11):846–851, November 2005.
- [136] B. Spilker and D.A. Revicki. Taxonomy of quality of life. In P. Spinhoven, editor, *Quality of Life and Pharmacoeconomics in Clinical Trails*, volume Second Edition, pages 25–32. Lippincott-Raven Publishers, Philadelphia, 1996.
- [137] A.D. Wu and B.D. Zumbo. Understanding and using mediators and moderators. *Social Indicators Research*, 87(3):367–392, July 2008.
- [138] E.J. Hurkmans, S. Maes, V. De Gucht, K. Knittle, A.J. Peeters, H.K. Ronday, and T.P.M. Vliet Vlieland. Motivation as a determinant of physical activity in patients with rheumatoid arthritis. *Arthritis Care & Research*, 62(3):371–377, March 2010.
- [139] A.M. Stiggelbout, E. Vogel-Voogt, E.M. Noordijk, and T.P.M. Vliet Vlieland. Individual quality of life: adaptive conjoint analysis as an alternative for direct weighting? *Quality of Life Research*, 17(4):641–649, May 2008.

- [140] Jr. Ware, J.E., M.K. Snyder, W.R. Wright, and A.R. Davies. Defining and measuring patient satisfaction with medical care. *Evaluation and Program Planning*, 6(3-4):247–263, 1983.
- [141] M.F. Scheier and C.S. Carver. Optimism, coping, and health - assessment and implications of generalized outcome expectancies. *Health Psychology*, 4(3):219–247, 1985.
- [142] L.I. Pearlin and C. Schooler. The structure of coping. *Journal of Health Social Behavior*, 19(1):2–21, March 1978.
- [143] J.E. Ware and C.D. Sherbourne. The mos 36-item short-form health survey (sf-36) .1. conceptual-framework and item selection. *Medical Care*, 30(6):473–483, June 1992.
- [144] A.M. Stiggelbout, G.M. Kiebert, J. Kievit, J.W. Leer, J.D. Habbema, and J.C. de Haes. The "utility" of the time trade-off method in cancer patients: feasibility and proportional trade-off. *Journal of Clinical Epidemiology*, 48(10):1207–1214, October 1995.
- [145] F.E. van Nooten, X. Koolman, and W.B. Brouwer. The influence of subjective life expectancy on health state valuations using a 10 year tto. *Health Economics*, 18(5):549–558, May 2009.
- [146] J.M. Morea, R. Friend, and R.M. Bennett. Conceptualizing and measuring illness self-concept: A comparison with self-esteem and optimism in predicting fibromyalgia adjustment. *Research in Nursing & Health*, 31(6):563–575, December 2008.
- [147] M.F. Scheier, C.S. Carver, and M.W. Bridges. Distinguishing optimism from neuroticism (and trait anxiety, self-mastery, and self-esteem) - a reevaluation of the life orientation test. *Journal of Personality and Social Psychology*, 67(6):1063–1078, December 1994.
- [148] R.M. Baron and D.A. Kenny. The moderator mediator variable distinction in social psychological-research - conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6):1173–1182, December 1986.
- [149] M.E. Sobel. Asymptotic confidence intervals for indirect effects in structural equations models. In S. Leinhardt, editor, *Sociological methodology*, pages 290–312. Jossey-Bass, San Francisco, 1982.
- [150] R. Arnold, A.V. Ranchor, R. Sanderman, G.I.J.M. Kempen, J. Ormel, and T.P.B.M. Suurmeijer. The relative contribution of domains of quality

- of life to overall quality of life for different chronic diseases. *Quality of Life Research*, 13(5):883–896, June 2004.
- [151] D.A. Revicki and R.M. Kaplan. Relationship between psychometric and utility-based approaches to the measurement of health-related quality-of-life. *Quality of Life Research*, 2(6):477–487, December 1993.
- [152] A. Campbell. Subjective measures of well-being. *American Psychologist*, 31(2):117–124, 1976.
- [153] J.C. de Haes and K. Welvaart. Quality of life after breast cancer surgery. *Journal of Surgical Oncology*, 28(2):123–125, February 1985.
- [154] B.G. Tabachnick and L.S. Fidell. *Using multivariate statistics*, volume Fourth Edition. Allyn & Bacon, Needham Heights, MA, 2001.
- [155] L.M. McCracken. Learning to live with the pain: acceptance of pain predicts adjustment in persons with chronic pain. *Pain*, 74(1):21–27, January 1998.
- [156] P.A. Ubel, R.A. Hirth, M.E. Chernew, and A.M. Fendrick. What is the price of life and why doesn't it increase at the rate of inflation? *Archives of Internal Medicine*, 163(14):1637–1641, July 2003.
- [157] M.W.M. Post, A.J. van Dijk, F.W.A. van Asbeck, and A.J.P. Schrijvers. Life satisfaction of persons with spinal cord injury compared to a population group. *Scandinavian Journal of Rehabilitation Medicine*, 30(1):23–30, March 1998.
- [158] M.W.M. Post, L.P. de Witte, F.W. van Asbeck, A.J. van Dijk, and A.J. Schrijvers. Predictors of health status and life satisfaction in spinal cord injury. *Archives of Physical Medicine and Rehabilitation*, 79(4):395–401, April 1998.
- [159] S. Folkman and J.T. Moskowitz. Positive affect and the other side of coping. *American Psychologist*, 55(6):647–654, June 2000.
- [160] R.G. Tedeschi and L.G. Calhoun. The posttraumatic growth inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress*, 9(3):455–471, July 1996.
- [161] S.J.T. Jansen, J. Kievit, M.A. Nooij, and A.M. Stiggelbout. Stability of patients' preferences for chemotherapy: The impact of experience. *Medical Decision Making*, 21(4):295–306, July 2001.

- [162] T.D. Wilson and D.T. Gilbert. Affective forecasting - knowing what to want. *Current Directions in Psychological Science*, 14(3):131–134, June 2005.
- [163] C.S. Saigal, J. Gornbein, K. Reid, and M.S. Litwin. Stability of time trade-off utilities for health states associated with the treatment of prostate cancer. *Quality of Life Research*, 11(5):405–414, August 2002.
- [164] C.F. van Koppenhagen, M.W. Post, L.H. van der Woude, S. de Groot, L.P. de Witte, F.W. van Asbeck, Heuvel W. van den, and E. Lindeman. Recovery of life satisfaction in persons with spinal cord injury during inpatient rehabilitation. *American Journal of Physical Medicine & Rehabilitation*, 88(11):887–895, November 2009.
- [165] C. Collin, S. Davis, V. Horne, and D.T. Wade. Reliability of the barthel adl index. *International Journal of Rehabilitation Research*, 10(3):356–357, 1987.
- [166] N.M. Crewe and J.S. Krause. An eleven-year follow-up of adjustment to spinal cord injury. *Rehabilitation Psychology*, 35(4):205–210, 2006.
- [167] M.W.M. Post, F.W. van Asbeck, A.J. van Dijk, and A.J. Schrijvers. Dutch interview version of the barthel index evaluated in patients with spinal cord injuries. *Nederlands Tijdschrift Voor Geneeskunde*, 139(27):1376–1380, July 1995.
- [168] K.T. Lucke, H. Coccia, J.S. Goode, and J.F. Lucke. Quality of life in spinal cord injured individuals and their caregivers during the initial 6 months following rehabilitation. *Quality of Life Research*, 13(1):97–110, February 2004.
- [169] W.B. Mortenson, L. Noreau, and W.C. Miller. The relationship between and predictors of quality of life after spinal cord injury at 3 and 15 months after discharge. *Spinal Cord.*, 48(1):73–79, January 2010.
- [170] J.S. Krause. Adjustment after spinal cord injury: A 9-year longitudinal study. *Archives of Physical Medicine and Rehabilitation*, 78(6):651–657, June 1997.
- [171] A. Schwartz, G. Hazen, A. Leifer, and P. Heckerling. Life goals and health decisions: What will people live (or die) for? *Medical Decision Making*, 28(2):209–219, March 2008.
- [172] J.C. de Haes, J.H. de Ruiter, R. Tempelaar, and B.J. Pennink. The distinction between affect and cognition in the quality of life of cancer

- patients—sensitivity and stability. *Quality of Life Research*, 1(5):315–322, October 1992.
- [173] A. Robinson, P. Dolan, and A. Williams. Valuing health status using vas and tto: What lies behind the numbers? *Social Science & Medicine*, 45(8):1289–1297, October 1997.
- [174] P.F.M. Stalmeier, L.M. Lamers, J.J.V. Busschbach, and P.F.M. Krabbe. On the assessment of preferences for health and duration - maximal endurable time and better than dead preferences. *Medical Care*, 45(9):835–841, September 2007.
- [175] D.T. Gilbert, M.D. Lieberman, C.K. Morewedge, and T.D. Wilson. The peculiar longevity of things not so bad. *Psychological Science*, 15(1):14–19, January 2004.
- [176] T.D. Wilson and D.T. Gilbert. How happy was i, anyway? a tetrospective impact bias. *Social Cognition*, 21(6):421–446, 2003.
- [177] Ubel P. A. Jankovic A. Smith D.M. Langa K. M. and Fagerlin A. What is perfect health to an 85-year-old?: Evidence for scale recalibration in subjective health ratings. *Medical Care*, 43(10):1054–1057, 2005.
- [178] G. Loewenstein and D Schkade. Wouldn't it be nice? predicting future feelings. In D. Kahneman, E. Diener, and N. Schwarz, editors, *Well-Being The foundations of Hedonic Psychology*, number 5, pages 85–105. Russell Sage Foundation, New York, 1999.
- [179] D.T. Gilbert, M.J. Gill, and T.D. Wilson. The future is now: Temporal correction in affective forecasting. *Organizational Behavior and Human Decision Processes*, 88(1):430–444, May 2002.
- [180] K.J. Smith, J. Tsevat, R.B. Ness, H.C. Wiesenfeld, and M.S. Roberts. Quality of life utilities for pelvic inflammatory disease health states. *Sexually Transmitted Diseases*, 35(3):307–311, March 2008.
- [181] D.A. Schkade and D. Kahneman. Does living in california make people happy? a focusing illusion in judgments of life satisfaction. *Psychological Science*, 9(5):340–346, September 1998.
- [182] G. Loewenstein. Out of control: Visceral influences on behavior. *Organizational Behavior and Human Decision Processes*, 65(3):272–292, March 1996.

- [183] E. Diener, R.A. Emmons, R.J. Larsen, and S. Griffin. The satisfaction with life scale. *Journal of Personality Assessment*, 49(1):71–75, 1985.
- [184] Smith D.M. Loewenstein G. Jankovich A. and Ubel P.A. The dark side of hope: Lack of adaptation to a temporary versus permanent disability. *Health Psychology (In Press)*, 2010.
- [185] Tversky A. and Kahneman D. Advances in prospect-theory - cumulative representation of uncertainty. *Journal of Risk and Uncertainty*, 5(4):297–323, October 1992.
- [186] R.E. Lucas. Long-term disability is associated with lasting changes in subjective well-being: Evidence from two nationally representative longitudinal studies. *Journal of Personality and Social Psychology*, 92(4):717–730, April 2007.
- [187] D.M. Smith, G. Loewenstein, P. Rozin, R.L. Sherriff, and P.A. Ubel. Sensitivity to disgust, stigma, and adjustment to life with a colostomy. *Journal of Research in Personality*, 41(4):787–803, August 2007.
- [188] C.E. Schwartz and M.A. Sprangers. Methodological approaches for assessing response shift in longitudinal health-related quality-of-life research. *Social Science & Medicine*, 48(11):1531–1548, June 1999.
- [189] F. X. Gibbons. Social comparison as a mediator of response shift. *social science and medicine*. *Social Science and Medicine*, 48(11):1517–1530, 1999.
- [190] Daltroy L. Larson M. Eaton H. Phillips C. and Liang M. Discrepancies between self-reported and observed physical function in the elderly: The influence of response shift and other factors. *Social Science and Medicine*, 48:1549–1561, 1999.
- [191] Schwartz C. and Sendor R. Helping others helps oneself: Response shift effects in peer support. *Social Science and Medicine*, 48:1563–1575, 1999.
- [192] I. B. Wilson. Clinical understanding and clinical implications of response shift. *Social Science and Medicine*, 48(11):1577–1588, 1999.
- [193] C.E. Schwartz, R. Bode, N. Repucci, J. Becker, M.A.G. Sprangers, and P.M. Fayers. The clinical significance of adaptation to changing health: A meta-analysis of response shift. *Quality of Life Research*, 15(9):1533–1550, November 2006.

- [194] G.L. Albrecht and P.J. Devlieger. The disability paradox: high quality of life against all odds. *Social Science & Medicine*, 48(8):977–988, April 1999.
- [195] P. Ekman. *Emotions Revealed*. New York: Times Books., 2003.
- [196] J. C. Brunstein. Personal goals and subjective well-being: A longitudinal study. *Journal of Personality and Social Psychology*, 65(5):1061–1070, 1993.
- [197] Lepore S. J. and Eton D. T. *Response shifts in prostate cancer patients: An evaluation of suppressor and buffer modes*. Washington, D.C.: American Psychological Association., 2000.
- [198] Kahneman D. Wakker P. P. and Sarin R. Back to bentham? explorations of experienced utility. *The Quarterly Journal of Economics*, 112(2):375–405, 1997.
- [199] Loewenstein G. and Ubel P.A. Hedonic adaptation and the role of decision and experience utility in public policy. *Journal of Public Economics*, 92(8-9):1795–1810, 2008.
- [200] Brossart D. Clay D. and Willson V. Methodological and statistical considerations for threats to internal validity in pediatric outcome data: Response shift in self-report outcomes. *Journal of Pediatric Psychology*, 27(1):97–107, 2002.
- [201] Schwartz C. Sprangers M. Carey A. and Reed G. Exploring response shift in longitudinal data. *Psychology & Health*, 19(1):51–59, 2004.
- [202] D.M. Smith, G. Loewenstein, C. Jepson, A. Jankovich, H.I. Feldman, and P.A. Ubel. Mispredicting and misremembering: Patients with renal failure overestimate improvements in quality of life following a kidney transplant. *Health Psychology*, 27(5):653–658, 2008.
- [203] D. Kahneman. Determinants of health economic decisions in actual practice: The role of behavioral economics. *Value in Health*, 9(2):65–67, 2006.
- [204] F.J. Oort. Using structural equation modeling to detect response shifts an true change. *Quality of Life Research*, 14(3):587–98, 2005.
- [205] P. Menzel, P. Dolan, J. Richardson, and J.A. Olsen. The role of adaptation to disability and disease in health state valuation: a preliminary normative analysis. *Social Science & Medicine*, 55(12):2149–2158, December 2002.

- [206] J. Halpern and R.M. Arnold. Affective forecasting: An unrecognized challenge in making serious health decisions. *Journal of General Internal Medicine*, 23(10):1708–1712, October 2008.

Publications

- Peeters, Y., Vliet Vlieland T.P.M, and Stiggelbout, A.M.; *Focusing illusion, adaptation and EQ-5D health state descriptions: The difference between patients and public*. Health Expectations 2011 Mar 3, Epub ahead of print.
- Peeters, Y., Ranchor A.V., Vliet Vlieland T.P.M, and Stiggelbout, A.M.; *Effect of adaptive abilities on utilities, direct or mediated by mental health?* Health Quality of Life Outcomes 2010, 12 (8):130
- Peeters, Y., and Stiggelbout, A.M.; *Health state valuations of patients and general public analytically compared; A meta-analytical comparison of patient and population health state utilities*. Value in Health 2010, 13(2): 306-309
- Peeters, Y., and Stiggelbout, A.M.; *Valuing health: Does enriching a scenario lead to higher utilities?* Medical Decision Making 2009, 29 (3): 334-342
- Peeters, Y., Boersma, S.N., and Koopman, H.M.; *Predictors of quality of life: A quantitative investigation of the stress-coping model in children with asthma*. Health and Quality of Life Outcomes 2008, 6: 24
- Ubel P.A., Peeters Y., Smith, D.M.; *Abandoning the Language of “Response Shift”: A Plea for Conceptual Clarity in Distinguishing Scale Recalibration from True Changes in Quality of Life*. Quality of Life Research 2010, 19 (4):465-471.
- Vermunt, R., Peeters, Y., Berggren, K.; *How fair treatment affects saliva cortisol release in stressed low and high type-A behavior individuals*. Scandinavian Journal of Psychology 2007; 48: 547-555.
- Peeters, Y., Putter, H., Snoek, G.J., Sluis, T.A.R., Smit, C.A.J., Post, M.W.M., Stiggelbout, A.M.; *The influence of time and adaptation on health state valuations in patients with Spinal Cord Injury*. Under revision (Medical Decision Making)
- Peeters, Y., Smith, D.M., Loewenstein, G., and Ubel, P.A.; *Newly disabled patients expect to adapt to their condition*. Conditionally Accepted (Journal of Happiness Studies)
- Stiggelbout A.M., Peeters Y., de Jong Z.; *Health state utilities from patients, partners and the public: in search of an explanation for the gap between the imagined and the real*. Submitted.

Curriculum Vitae

Yvette Peeters werd op 12 augustus 1981 geboren in Venlo, als kind van Hans Peeters en Riki Jacobs en zusje van Vivian. In 1999 behaalde ze haar VWO diploma aan het Bouwens van der Boijecollege in Panningen en begon zij aan haar studie psychologie aan de Universiteit Leiden. Als onderdeel van haar studie volgde ze een onderzoeksstage aan de Höögskolan i Skövde (Zweden) en een klinische stage aan het Willem-Alexander Kinder- en Jeugdcentrum van het Leids Universitair Medisch Centrum. Eind 2005 behaalde ze haar doctoraal examen in zowel Methoden en Technieken als Klinische- en Gezondheidspsychologie.

In 2006 begon zij haar promotieonderzoek in dienst van de Universiteit Leiden, bij de afdeling Medische Besliskunde van het Leids Universitair Medisch Centrum waarvan de resultaten staan beschreven in dit proefschrift. In het kader van dit onderzoek heeft ze in 2009 een bezoek gebracht aan het Center for Bioethics and Social Sciences in Medicine (CBSSM) van de University of Michigan (U.S.), waar ze heeft samengewerkt met Prof. dr. Peter A. Ubel en dr. Dylan M. Smith. Naast haar onderzoek heeft ze in 2007 in het bestuur gezeten van het Leids Promovendi Overleg en momenteel is ze associate editor van het Journal of European Psychology Students (JEPS) een tijdschrift gericht op studies uitgevoerd door studenten. Samen met haar partner Jan Edelaar kreeg ze in 2010 een zoon, Kyan.

Na haar promotie onderzoek zal ze in juni 2011 starten op het project “Web-based time trade-off incorporating interviewer help: efficiency with validity” op de afdeling Medische Besliskunde van het Leids Universitair Medisch Centrum. Hiervoor heeft ze samen met haar collega’s een subsidie gekregen van ZonMW.

Je kunt niet anders zijn dan wie je bent

- STEF BOS, MIJN HART GEVOLGD -

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