

Out Of The Bioethicists' Box: How Do Lay People Value Life?

ABSTRACT

Health policies depend on the metric for the value of lives they target. How do lay people value life? 503 internet participants (18-89 years-old) rated the relative value of lives of people aged 5 - 80 years old with normal life expectancy or only 2 years to live. Ratings were influenced by question framing. In the “saved” frame, raters focused on “years left”. In the “lost” frame, however, raters focused on “years lived” –younger lives were judged more valuable, even if they have equivalent number of years left as older lives. Ratings were also ego-centrally biased by raters’ own age.

Health policies require a metric for the value of lives they target. When health resources are limited (e.g. vaccine shortage), different metric of life values (all lives equal, quality adjusted life years, healthy-year equivalents etc) lead to different policies. Outside the debate on life metrics among bioethicists, how do lay people value life? And, are they influenced by question framing? The current study explores these questions.

503 participants (age 18-89, $M = 46.42$, $SD = 17.95$) recruited from a commercial survey company completed a web-survey. A hypothetical scenario described an island where 1000 residents were expected to die from the flu. Subjects rated the acceptability of 12 vaccination policies on a 0-100 scale. Half of the subjects read the scenario in a lives saved version, where policies were described as saving 500 people of specified age (5, 20, 30, 40, 60 and 80), who were either ill (with 2 years to live) or healthy (living to full life). Half of the subjects read the scenario in a lives lost frame, which described the same 12 policies phrased as resulting in 500 lives lost.

For ease of analysis, acceptability ratings were reversed in the second condition; thus all ratings reflect the value assigned to lives. A hierarchical linear model of life value ratings used two Level 1 predictors: age of lives and health status, and two Level 2 predictors: frame and rater’s own age. Overall, ill lives were valued less than healthy lives. Critically, a significant 3-way interaction among age of lives, health status and frame ($p = .001$) indicates that in the lives lost frame, the slope of age ($p < .001$ for both) was similar for healthy lives ($B = -.29$ per year of age) and for ill lives ($B = -.26$), but in the lives saved condition, age was a significant predictor for value of healthy lives ($B = -.22$, $p < .001$) but not for ill lives ($B = -.04$, $p = .19$). These results indicate that in the lost frame, raters focused on “years lived” –younger lives were judged more valuable than older lives, even if they have equivalent number of years left. In the saved frame, raters focused on “years left” – policies were judged based on the number of life years saved.

Rater age interacted with target age, $F(1, 500) = 12.64$, $p < .001$): the regression lines on target age were steeper for young, compared to old participants, suggesting that although younger lives were valued more than older lives in general (except for ill lives in saved frame),

young participants tend to value young lives even more than old participants. However, the interaction between rater age and target age was modified by health status, $F(1, 500) = 4.54, p = .03$. Raters' judgments were biased by their own age more when they judged healthy targets, compared to when they judged ill targets, suggesting ego-centric judgments of life values were more likely targets were similar to self.

Lay people's judgments on life value are influenced by question framing. In addition, raters' own age biased the relative value they assign to lives of different age in an ego-centric fashion.

