Greater optimistic bias for survival was associated with choosing a **risky** medical procedure in a hypothetical end-of-life scenario.

**Methods:**

**Design:**
- Within-subjects, laboratory-analogue study

**Sample:**
- 276 college students
- Mean age = 19.6, SD = 3.3, Range = 18-41

**Gender**
- Men (28%)
- Women (71%)

**Race**
- White (27%)
- Asian/Pacific Islander (43%)
- Black (13%)
- American Indian/Alaskan Native (2%)
- Other (17%)

**Sample Breakdown:**
- 37% White
- 43% Asian/Pacific Islander
- 13% Black
- 2% American Indian/Alaskan Native
- 17% Other
- 71% Women
- 100% College Students

**Aim:**
- To examine whether individuals with an optimistic bias for their own survival and a close other’s survival would make riskier decisions in hypothetical end-of-life scenarios

**Procedures and Results:**

1. Participants were asked to read a hypothetical end-of-life medical scenario and imagine (a) being in the situation themselves and (b) having a close other in the situation:
   - “Imagine that you have been in an accident and are taken to a hospital. You have been admitted to the Intensive Care Unit and will need surgery to treat your injuries. The surgeon informs you there is a **50% (one in two) chance that you will survive** this surgery.”

2. Participants made an estimation of survival on a scale of 0 (will not survive) – 100% (will survive).
   - 49% of participants interpreted their own likelihood of survival as > 50%
   - 50% of participants interpreted their close other’s likelihood of survival as > 50%

3. Participants were asked to make an end-of-life medical decision.
   - “You can opt for resuscitation, but it involves risk of losing consciousness and suffering brain damage.”
   - 35% of participants had optimistic bias for their own survival and a close other’s survival
   - 51% of participants opted for resuscitation for themselves
   - 78% of participants opted for resuscitation for their close other

4. Participants were asked to make an estimation for the likelihood of suffering consequences (e.g., suffering brain damage) of a risky surgical procedure.

**Discussion:**

- Individuals who had an optimistic bias for survival were asked to describe their decision-making process.
- Interestingly, some participants who had an optimistic bias and were hopeful also indicated a tendency to prepare for the worst, suggesting that being positive may have a more nuanced role in medical decision-making.

**Background:**

- **Optimistic bias** is the tendency to overestimate the likelihood of positive events occurring
- Having an optimistic bias has been related to misinterpreting prognostic information and making riskier medical decisions
- This tendency has been demonstrated with medical decisions for oneself and a close other

**Discussion:**

- Individuals who display an optimistic bias for survival in hypothetical end-of-life medical scenarios extend their cognitive filter to their loved one in a similar situation, and to the likelihood of good surgical outcomes.
- An optimistic bias for survival does not influence choosing a medical procedure with risks, but it does influence the interpretation of surgical outcomes.