

Predictions of development of life quality and environmental quality

Petra Filkuková & Karl Halvor Teigen

[**simula** . research laboratory]

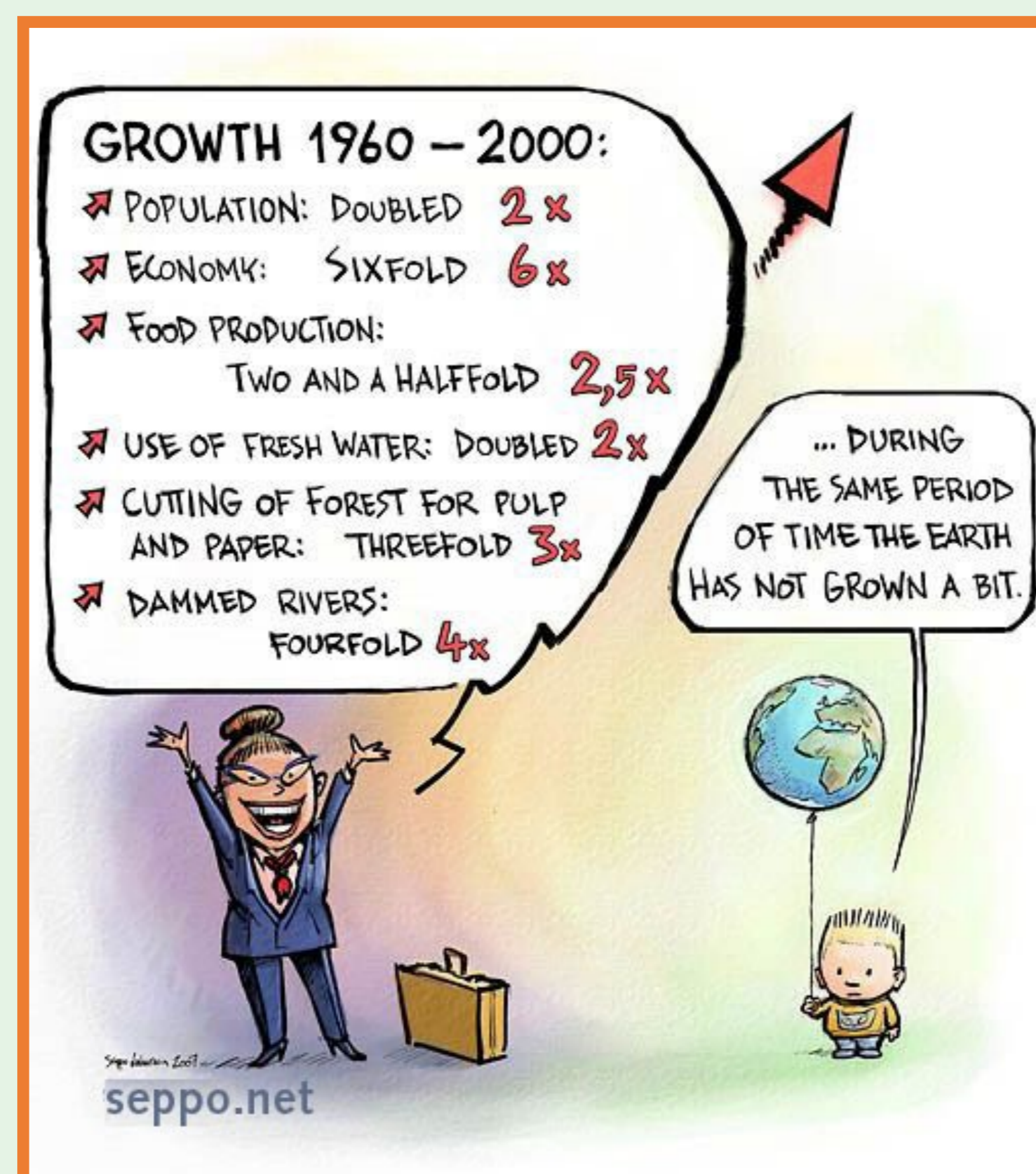
Introduction

The technical and scientific development improved people's lives in many ways, life expectancy has increased and hence one could assume that quality of people's life has improved over the years. However, growing production and development has also had its negative side-effects (pollution, extinction of species etc.). In our study, we investigated how participants perceive the development of life quality and environmental quality in the past and also their predictions regarding future development. Do they expect that there will be a turning point, when life quality will start to be significantly negatively affected by environmental quality, or do they expect that these two variables will be unrelated?

Experiment 1

In this study we focused on expectations regarding development of life quality. In a between-subjects design, participants marked on a graph their estimates of life quality:

- 1000 years ago
- 50 years ago
- in 50 years
- in 1000 years



Sample and method

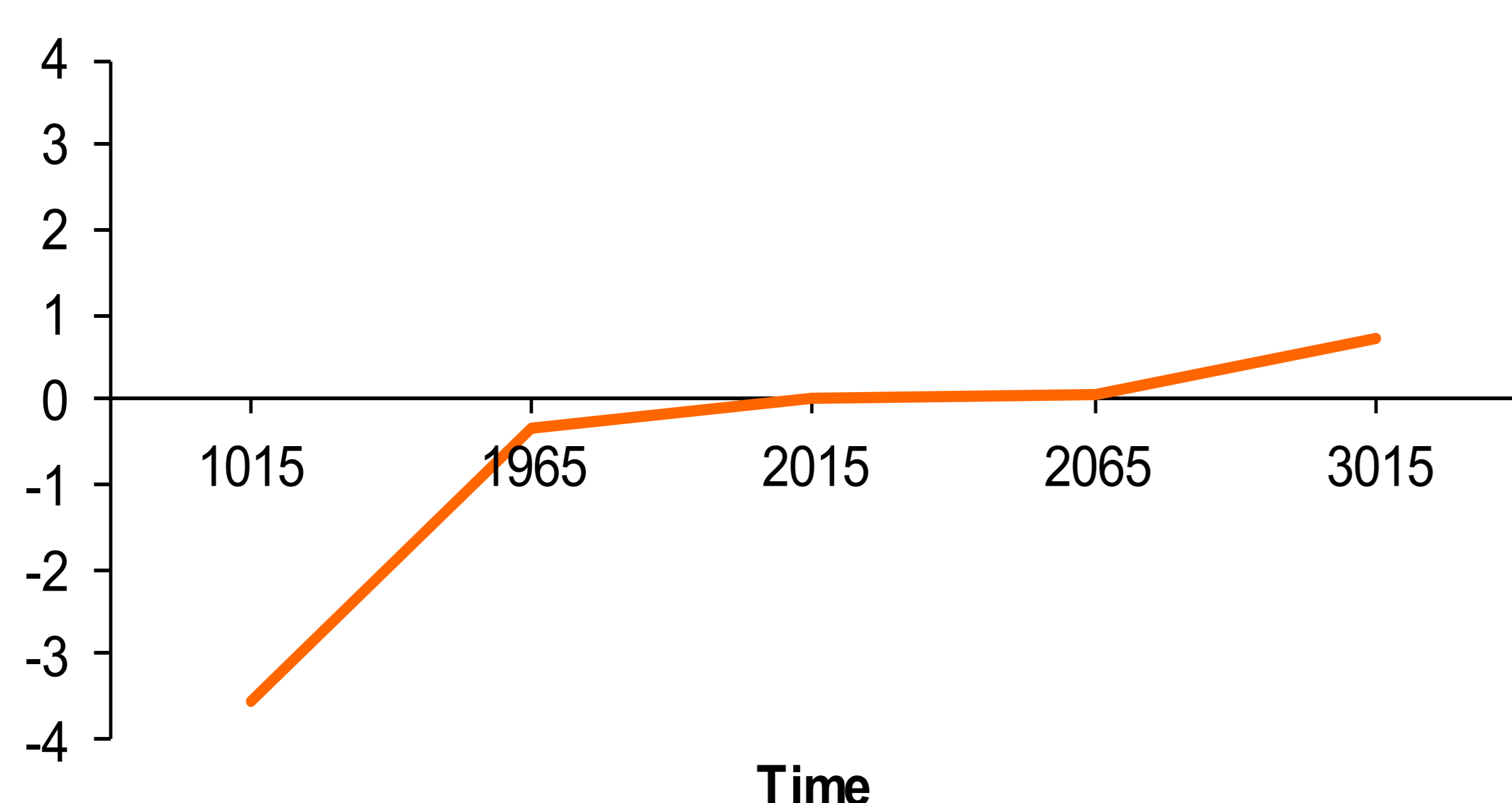
Participants were 147 students at the University of Oslo ($M = 24.2$ years; 61.2% women). The questionnaire contained a graph where the year of the research (2015) was marked as zero. Participants were asked to display the perceived distance (above or below axis) between current life quality and life quality in a specified year in the past or future.

Additionally, participants rated on 7-point scales their agreement with two statements about climate change beliefs: "I am sure climate changes occur," and "Claims of human activity changing the climate are exaggerated". The scale was adapted from Heath & Gifford (2006).

Results

- Participants estimated that life quality was in the past below current level.
- In future they expected flattening of the trend, life quality in 1000 years was estimated to be only slightly above current level.
- Participants' climate change beliefs were unrelated to their estimates of past or future life quality.

Figure 1: Development of life quality



Experiment 2

- How do participants estimate development of life quality and environmental quality during the span of 2000 years?
- Do they perceive development of life quality and environmental quality as independent of each other?
- How do participants define life quality and environmental quality?

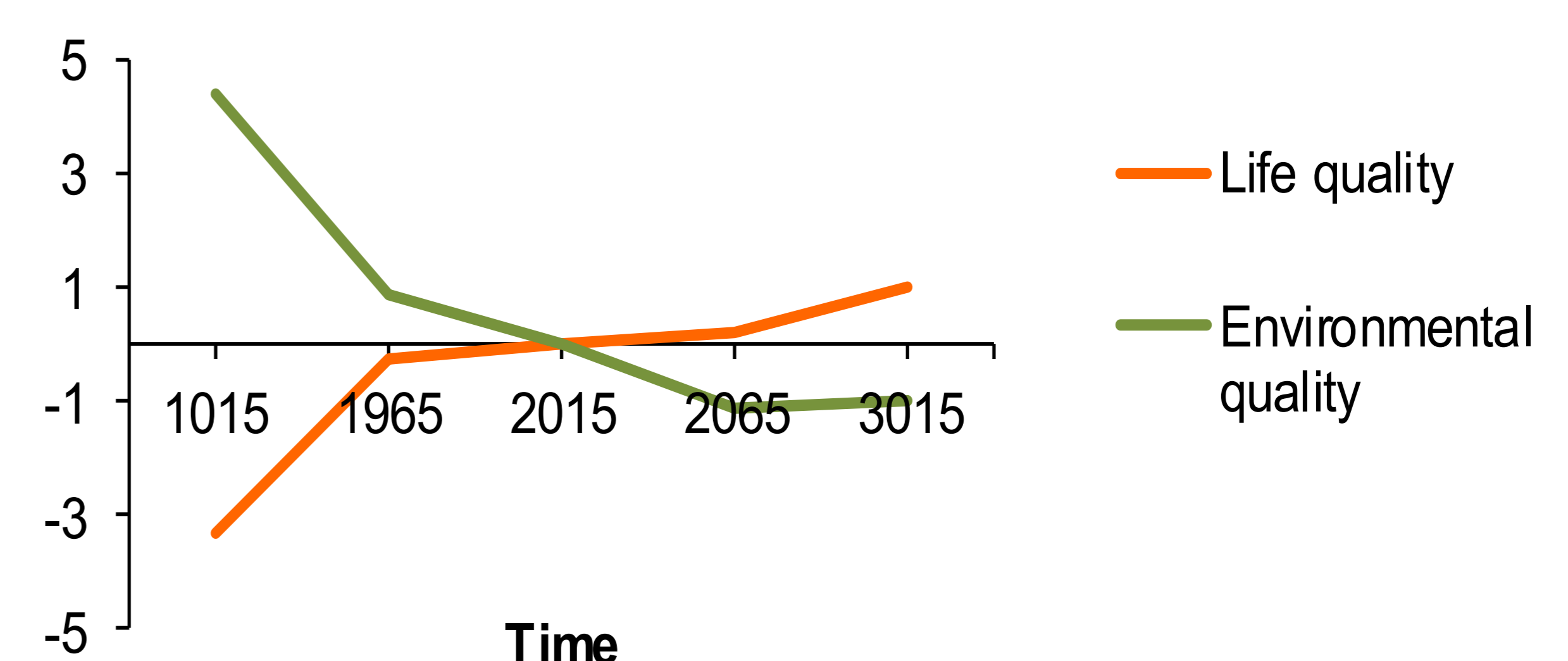
Sample and method

Participants were 181 students at the University of Oslo ($M = 21.5$ years; 61.9% women). Life quality and environmental quality were evaluated in a between-subjects design. Each participant was asked about four years of interest (1015, 1965, 2065, 3015). Additionally, participants rated components of life quality and environmental quality on 10-point scales. Climate change beliefs were again measured.

Results

- Findings regarding development of life quality were consistent with Experiment 1, where different years were presented in a between-subjects design.
- Participants perceived dramatic drop in environmental quality over the last 1000 years. They expected that the downwards trend would eventually stop in future.
- Individual climate change beliefs were unrelated to estimates of life quality and environmental quality.
- Participants perceived life quality as encompassing a number of factors, the strongest of which was happiness, followed by mental and physical health.
- Environmental quality was most closely related to air and water quality, ozone layer thickness and survival of species and, to a lesser extent, to absence of climate changes.

Figure 2: Development of life quality and environmental quality



Conclusion

Participants evaluated that over the last 1000 years, the quality of environment was rapidly decreasing, while the quality of life was increasing, though in a less steep trend than the damage to the environment. Flattening of both trends was predicted for future. In 1000 years, participants expected environmental quality to be only slightly worse than nowadays and life quality only slightly above the current level. Optimism regarding future development of environmental quality can have negative implications for nature, as taking actions to protect environment and limit consumption might not be perceived as urgent.