



SLEEP RESEARCH CENTER

The more you know, the better you sleep.™

Zeo Home Use Test Mid-Term Response

A Zeo White Paper

About Zeo Inc.

Our mission is to help people to discover new, scientifically-based ways to improve the quality of their lives through the power of sleep. To accomplish this mission, we combine breakthrough educational sleep technology and tools with proven coaching methods from both sleep science and behavioral science. We believe that companies should be built on a solid foundation of consumer insights and needs-based ideas, and on innovation, ethical values, and the right team of caring and responsible people. We developed our mission knowing it will shape the future of the company and help us focus on what is important – educating and motivating our customers to get a better night's sleep so they can feel their best.

To learn more about Zeo Inc. please visit us at www.myzeo.com.

John Shambroom
Vice President of Scientific Affairs
Executive Director, Zeo Sleep Research Center

070-0010 Rev 1.00

Advancing Science in Support of Sleep Fitness™

Introduction

A home use market test was conducted to determine users' self reported experience and response to the Zeo Personal Sleep Coach. Results were collected through a self reported internet administered survey. The test was designed to assess changes in the users' perceptions of their sleep for the purpose of providing consumer attitudinal and behavioral insights. It is not a scientific study and did not include a control group.

Methods

Users were pre-screened and selected to have expressed concerns either about their sleep and/or about their difficulty in waking up in the morning. Selected users were offered a free, multi-week trial of the Zeo Personal Sleep Coach. All users received Zeo on the same day. A pre-use survey was administered prior to receiving Zeo. The survey contained standardized questions based on a Likert scale pertaining to sleep quality, daytime sleepiness, and customized questions pertaining to quality of life, daytime function. Text-book and personal knowledge of sleep was surveyed in a true-false format. The same survey was administered at mid-term 6 weeks later.

Statistical analysis was conducted by The Healthcare Innovation and Technology Lab (www.hitlab.org) and the Zeo Sleep Research Center (www.myzeo.com). Mid-term reports were compared with pre-use reports. P-values less than 0.05 were considered significant. A factor analysis was performed to reveal associations between components of the survey.

Results

141 users participated. Of those, 130 completed the pre-use survey and 89 completed both the pre-use and mid-term surveys. All numbers in parenthesis are mid-term vs. pre-use result, in that order.

Sleep Quality

Users reported significantly improved sleep quality (7.1 vs. 9.6). Components of the sleep quality measure included:

- Improved subjective sleep quality
- Reduced time to fall asleep
- Longer time asleep
- More time asleep while in bed
- Better function during the day

Users reported that nightly disturbances to sleep did not change.

Daytime Sleepiness

Users reported significantly less sleepiness during the day (6.3 vs. 8.3).

Sleep Knowledge

Users' textbook knowledge of sleep was significantly improved, (14.6 correct answers vs. 13.9 correct answers out of 18 questions). More importantly, users' personal knowledge of their sleep and confidence in their ability to affect their sleep significantly improved (12.2 vs. 9.0).

Quality of Life

Users reported improvement in most areas of quality of life, including:

- Quality of their sleep
- How they felt during the day
- How well they performed during the day
- Their emotional status during the past four weeks

They reported no change in their health status.

Associations

Factor analysis revealed that improved personal sleep knowledge and feelings of improved control of their sleep were associated with better sleep quality, less daytime sleepiness, better daytime function, and improvements in how they felt during the day, how well they performed during the day, and their emotional feeling, performance, and sense of well-being.

Conclusions

Users of the Zeo Personal Sleep Coach reported significant changes in personal sleep knowledge, feelings of control of their sleep, sleep quality, and daytime feel. These preliminary results from the mid-term analysis of the market test are consistent with an association expressed by "The More You Know, the Better You Sleep", and also by the phrase "the Better You Feel".

The market test was designed to assess changes in users' perceptions of their sleep and wakefulness, however there was no control group, and therefore the changes cannot necessarily be attributed to the use of the Zeo Personal Sleep Coach. No such conclusion is implied. These preliminary results show promise that use of the Zeo Personal Sleep Coach may lead to improvements in users' knowledge of sleep, sleep quality, and daytime feel. A controlled scientific research study would be required to demonstrate that these benefits can be attained through use of the Zeo Personal Sleep Coach.