

DRIVING QUESTION



"How can we decide on the best smoking cessation aid?"



אוניברסיטת בן-גוריון בנגב
Ben-Gurion University of the Negev
جامعة بن غوريون في النقب

LOCAL WORKING GROUP MEMBERS

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SCENARIO

Save our dad!

Your Role
Background
Data

Success rates (II)

The following graph compares abstinence rates in 4 groups of participants: those who received medication B, those who received *nicotine* patch, those who received *nicotine* gum, and those who received placebo medication.

Time (weeks)	B (%)	Patch (%)	Gum (%)	Placebo (%)
12	55	45	35	25
52	30	25	20	15

Hints

- Gadi - personal profile
- Safety issues
- Comparing treatments
 - Reducing weight gain
 - Craving reduction
 - Adverse effects
 - Success rates
 - Success rates (II)

Gadi is Yael (16) and Uri's (14) father. Gadi is a heavy smoker who decided to quit smoking after he had been diagnosed as suffering from COPD, a chronic lung disease related to smoking. He finally understood that smoking affected his health, and that he had no time to waste. Gadi found out

that his decision was only the beginning of a long and frustrating journey. He could not manage through the day without his cigarettes. Gadi realized that he needed professional help, but had no idea about what alternatives he had, and which of these was the optimal choice.

PILOT ENACTMENT

Begin date: May 11th 2009
End date: Jun. 28 2009
Number of sessions: 11
Duration of each session: 2-3 per week, 90-minute sessions
Grade level: 10th grade (15-16 years old)
Subject: Biology
Number of participating students: 35
Enactment teachers: 1

WORKSPACE

The workspace includes the following templates:

Initial reflections – in which students state their predictions regarding the advantages and disadvantages of different treatments, *before* they analyze quantitative data

Thought questions – in which students deal with the issue of fitting the optimal treatment to a specific person

Criterion template – in which students rank all treatments according to one criterion, using the quantitative data in the relevant graph/s. Students use 4 copies of this template, one for each criterion

Comparison table template – in which students integrate the findings previously stored in the criterion templates into a single comparison table. Students then sum the ranking data to reach a final ranking of the alternatives

LEARNING GOALS

By the end of the intervention students are expected to:

- a. Be able to apply a systematic decision making model (equal weight) for multiple-criteria and multiple alternatives scenarios.
- b. Be able to extract comparative features from graphs.
- c. Understand basic concepts in the neurobiology of drug addiction (withdrawal symptoms, craving, etc.).
- d. Understand the importance of control groups with placebo treatment in clinical studies.

INQUIRY ACTIVITY OVERVIEW

- 1 Students introduced to Stochasmos and decision making model using an introductory environment – a decision making task (choosing the best PC game)
- 2 Students go through background materials concerning nicotine addiction and possible treatments in Stochasmos, work on "initial reflections" template in workspace
- 3 Students compare the personal medical profile of the patient with safety warnings regarding each treatment.
- 4-7 Students infer relative ranking of the various treatments from graphs.
- 8 Students summarize their findings in a comparison table to reach a final decision - Class discussion