

## CREATE workshop report

### CREATE 2010: “Computer-Tailored Interventions”

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How to develop a computer-tailored intervention? From 21 different countries, 30 participants attended the 2010 CREATE workshop to find out the answer. This year's host city was Cluj-Napoca, located in the central part of Romanian Transylvania, one of the most important academic, cultural, industrial and business centers in Romania. It hosts the country's largest university, Babeş-Bolyai University, the location of this year's EHPS Conference that took place from September 1st to 4th.

Being a well-established professor in Health Communication and one of the pioneers on computer-tailoring and e-health in the Netherlands, Hein de Vries was the facilitator of this year's workshop. His aim was to teach the basic principles of setting up computer-tailored interventions and developing tailoring algorithms, and to let us develop, pilot and evaluate a small computer-tailored intervention. Assisted by two co-facilitators Daniela Schulz and Matthijs Eggers, also from Maastricht University in the Netherlands and both experienced in the development of computer-tailored interventions, the early career workshop took off on September 29th.

Currently, computer-tailoring is one of the most promising and innovative approaches in health education. Better exposure, more intensive cognitive processing as a result of individualization and the self-evaluation properties of computer-tailoring have been proposed as important success factors (Krebs, Prochaska, & Rossi, 2010). Computer-tailoring can be defined as personalization of health education materials through a largely computerized process (de Vries, & Brug, 1999). In short, people are surveyed or interviewed, and the results are used to develop individualized feedback and advice (Brug, Oenema, & Campbell, 2003). De Vries sketched a clear stepwise approach of developing a computer-tailored intervention. An essential first step is formulating clear goals: what is our goal population and what do we want them to do? What behaviour and actions do we aim for? Both proximal and distal factors should be defined and recognized in a theoretical model: the foundation of the intervention. Consequently, the factors in the model should be assessed by a questionnaire. Our first challenge: create



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this theoretical foundation and develop a questionnaire applicable to the health topic of interest. Once a buddy was found, we explored this first phase and soon discovered that setting up a computer-tailored intervention means making thoughtful decisions. The length of the questionnaire, type of constructs used, personalization of the question (i.e. “When I smoke, this will increase my chances of getting lung cancer” versus “Smoking causes lung cancer”) and the type of answering scales (one- versus two-sided) used are directly linked to the drop-off rate, length of the tailored feedback messages and construct validity.

The next step was to design the tailoring program and provide tailored feedback messages. With the help of a bulky manual and two experienced co-facilitators we were introduced to Tailorbuilder, a web-based application that can be used to create and conduct web-based questionnaires and design and implement computer-tailored interventions. Tailoring and skip formulas, debuggers and advice blocks soon all became familiar expressions during the second day of the workshop. Here again, crucial decisions must be made and strategies must be planned. Obviously, building messages and communicating them needs clear objectives on tailoring and feedback strategies. For instance, incorporating recognizable aspects of a person in the ►

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content information, personalization, is an important feedback strategy. Attention and motivation to process messages can be increased by identification (identifying a person by name or using pictures of that person), customization (“From the response that you gave, it appears that...”) and contextualization (framing messages based on demographic information) of feedback messages (Hawkins, Kreuter, Resnicow, Fishbein, & Dijkstra, 2008). In addition, the content focus of the feedback messages can be switched from either descriptive (“You mentioned that smoking will help to make friends”), to normative (“There are more people that hold the same idea”) and evaluative (“Actually, you are not quite right about that”) or a combination of those.

We can conclude that this year’s CREATE workshop was a well-tailored one. Being able to directly apply theory to the development of your own mini-intervention on your own health topic was a strong motivator for the participants. Although developing a computer-tailored intervention is a complex and comprehensive process, this workshop introduced us to the main principles of computer-tailoring and taught us a stepwise approach for its development and implementation. Finally, it was a great experience to get to know fellow researchers from different nationalities and backgrounds, but somehow all for various reasons interested in the topic of computer-tailoring. The CREATE team excelled in the organisation of the workshop and matching social programme. They offered us a glimpse of the city of Cluj-Napoca from multiple perspectives: historic, gastronomic, “choreographic” and sportive. I would definitely recommend fellow early career researchers to attend next year’s workshop on “Systematic Review, Meta-Analysis and Qualitative Meta-Synthesis” on Crete and if I were you, I would already start practicing your dodgeball skills. ■

#### References:

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