How to design health information for low-literate professionals?

Objective
The objective of this study is to get more insight into how textual information can be adapted for people with limited health literacy. The effects of adding pictograms and a motivational agent to a brochure on ticks and Lyme disease on appreciation, comprehensibility and intention were measured.

Landscape workers have an increased chance of tick bites and Lyme disease. Among this target group, there are many people with limited literacy skills who are not able to understand the existing educational brochures.

Results
Appreciation
Overall appreciation is high (M = 4.36, SD = .46, scale 1 – 5). Participants find the brochure informative and instructive.

An interaction effect is found (F(1, 106) = 4.26, p = .04), indicating that if the motivational agent is absent, the appreciation is higher if pictograms are absent too.

Comprehensibility
The average score on comprehensibility is 9.12 (SD = 2.31, maximum possible score = 14).

A main effect for motivational agent is found (F(1, 105) = 5.41, p = 0.02). If the motivational agent is absent, comprehensibility is higher.

Intention
The intention to adhere to the measures in the brochure is very high among the four participant groups (M=20.95, SD = 2.45, maximum possible score = 24).

Would you disinfect the wound after you have removed a tick?

“Yes of course!
I’ve just read in the brochure you should do that.”

Participant 71

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Method
A new brochure on ticks and Lyme disease was created. The use of language was adapted to the low-literate target group. A 2×2 between subjects design was used, consisting of 4 different brochures.

110 landscape workers, employed at work centers, participated in this study.

Conclusion
Pictograms and a motivational agent are not beneficial for our low-literate target group. A motivational agent has a negative effect on comprehensibility.

Possible explanations:
• Our target group already benefited from the adaptation of the use of language.
• Adding a motivational agent might lead to an increase in cognitive load because the information is redundant.