

# Skin cancer probability assessment and the grammaticalization of the future: the role of epistemic modality

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The way we think about future events may be influenced by the way the future is grammaticalized in language. However, experimental investigations have not yet found sufficient evidence to support this claim (e.g., Jäggi et al. 2020). Rather than simply considering whether a language uses future tense to mark the future, Robertson & Roberts (2023) recently suggested testing epistemic modality of a language which marks probability or likelihood.

This notion is applicable to research in health communication, as its goal is to effectively communicate health-relevant (future) outcomes. The aim of this study was to assess the role of the grammaticalization of the future and epistemic modality in the context of effective health messages for skin cancer.

Concretely, we conducted two experiments where we presented participants with narratives that varied in terms of verb tense and epistemic modality. Participants' perceived cognitive (Experiment 1) and affective (Experiment 2) likelihood of developing skin cancer were assessed. In Experiment 1 (cognitive likelihood), we found a main effect of epistemic modality. In Experiment 2 (affective likelihood), we found a main effect of verb tense. We discuss the results in terms of the significance for the theoretical framework and applied research in health psychology.

## References

- Jäggi, Tiziana, Sayaka Sato, Christelle Gillioz & Pascal Mark Gygax. 2020. An Interdisciplinary Approach to Understanding the Psychological Impact of Different Grammaticalizations of the Future. *Journal of Cognition* 3(1). 10. <https://doi.org/10.5334/joc.100>.
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