

POSTER

**BOOSTING NUDGING EFFECTS BY MESSENGER IMPRESSION TO  
PROMOTE CARBON RECYCLING TECHNOLOGIES**

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**ABSTRACT**

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Previous studies have revealed that messages highlighting kin support, which we call ‘familial nudging,’ are a universal intervention to moderate risk-averse attitudes toward a wide variety of topics in multiple cultures. However, it is still unclear if this type of intervention can have larger effects when messages are sent by messengers who are attractive to receivers. To tackle this problem, we designed messages to moderate risk-averse attitudes toward carbon recycling technology, which reuses CO<sub>2</sub> emitted through industrial activities to reduce carbon emissions in the atmosphere. We then added virtual messengers with their face pictures and profiles next to the descriptions of the technology and performed randomized controlled trials to measure the message effects with more than 4,000 responses obtained from Canada, Japan, Norway, and the US. A linear regression analysis showed that our designed messages successfully moderated risk-averse attitudes toward carbon recycling technology. Moreover, additional intervention effects were observed when messenger biological sex and respondents’ sexual orientations were matched. This effect was observed only in unmarried respondents and for the perceived impact of the technology on themselves, but not on future generations, suggesting the possibility that messages to single people should be provided by messengers of opposite sexes. We also discuss the causality of these additional effects.