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# Effects of information processing styles and health message format on skin cancer risk perceptions and behavior intentions\*



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Effectively communicating the risks of unhealthy behaviors such as smoking, tanning, and unprotected sex has been a widely researched topic in the discipline of health psychology. One area of this research has focused on the type of format used to present the information. In the past, a majority of the research has investigated the factual presentation of information, but an emerging focus has been on the presentation of information within a narrative. So far only a few studies have directly compared the factual format's ability to increase risk perceptions and alter health related behavior to the narrative's ability to do so. These few studies have found inconsistent results regarding whether health information presented in a narrative format will be more likely than health information presented in a factual format to increase risk perceptions and motivate health behavior. These inconsistent findings may relate to the information processing style people use when presented with these messages. To investigate this possibility, we examined the interactive effects of information processing style and health message format on risk perceptions and behavior intentions related to skin cancer.

One hundred forty-seven female college students who use tanning beds were recruited from Psychology 101 courses. Participants were randomly assigned to either read a narrative message or factual message about how tanning beds can increase the risk of skin cancer. Additionally, prior to reading the message, participants were randomly assigned to a set of instructions for reading the messages that would activate either their experiential or rational processing style. The experiential processing style is characterized by using emotions and past experiences to digest information; the rational processing style, on the other hand, uses reason and logic to process information. We hypothesized that participants who experientially processed the information

in a narrative message format would increase their risk perception and worry of skin cancer and reduce their intentions to use tanning beds.

A series of ANOVAs were used to analyze the effects of the two factors on risk perceptions, worry, and behavioral intentions. An interaction between message format and processing style was revealed for three separate measures of risk perception as well as for worry. Participants' risk perceptions were most likely to increase when they processed the narrative experientially in comparison to processing the narrative rationally, the factual message rationally, or the factual message experientially. Similar effects were observed for worry. There were no main effects or interactive effects of message format and processing style on behavior intentions.

The present study qualifies inconsistencies in previous research that sometimes show a narrative message is more effective and other times a factual message is more effective. Our findings suggest that although narratives may be a promising route for increasing risk perceptions, they may be most effective when the information is processed in an experiential style.

**Keywords:** Skin cancer, health messages, narratives, processing system/style, and risk perceptions

\*This scholar and faculty mentor have requested that only an abstract be published.