Influences of communicated genetic v. lifestyle risks for colorectal cancer on emotions and behavioral screening intent

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According to a Center for Disease Control report in 2010, only 64% of those who should be screened for colorectal cancer (CRC) meet screening guidelines. This study explored attitudes and behavioral screening intent in a sample of the general United States population related to colorectal cancer risk information, including demographic risks, genetic risks, and lifestyle risks. Four different risk communication fact sheet conditions were utilized: genetic risk only, lifestyle risk only, genetic and lifestyle risks, and neutral (demographic) risks. Participants were asked to record up to 6 thoughts after the fact sheet was provided. These thoughts were coded for positive and negative valence, and for level of message processing. Behavioral screening intent questionnaires were administered pre and post-test. 345 participants completed the survey, with at least 82 participants in each fact sheet group. The genetic and lifestyle risks fact sheet group made significantly more comments on lifestyle factors than genetic factors (p<.001), and participants in the genetic risk only fact sheet group made significantly more negative than positive affect (p=.026) while no other group had significant differences. No group differences were observed in behavioral intention change scores. Providing participants with differing colorectal cancer risk information did not significantly alter behavioral intention change scores. Valence did not play a role in adjusting these effects, however the genetic risk group had more negative affect. Combined with participants preferring to comment on lifestyle factors, these data suggest that genetic information is not preferred or interesting, and might have a negative impact on behavioral intentions given its unchangeable nature.