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Self-Affirmation-Based Enhancement of Risks/Harms-Feedback (SABER-F): First steps in the development of a novel theory-led internet intervention for heavy drinkers

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Key findings

- Although there were no effects on drinking behavior, self-affirmation affected the processing of threatening alcohol-health information in a gender-dependent manner. Weak effects in line with the hypotheses were only found in men.

- Self-affirmed men showed less defensive responding to, and more engagement with, alcohol-health threat. Paradoxically, women who underwent self-affirmation showed a reduction in intention to reduce alcohol consumption.

- The self-affirmation procedure used here appears to be feasibly delivered via a web-based platform although effects may be diluted compared to lab-based procedures. The unexpected pattern of gender effects may relate to the population or 'mode of delivery.'

- In conclusion, harmful drinkers may show different patterns of self-affirmation effects, depending on gender. These findings have implications for the design of theory-based eHealth interventions.

Researchers

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Background

Harmful drinkers are generally aware that heavy drink can cause severe long-term health problems. Failure to act on such knowledge (e.g. by reducing consumption) is a hallmark of the addicted mindset, but is also seen in less severely affected individuals. How can such inaction be understood? Social and health-psychology theories suggest that motivational effects of health-information intended to raise awareness of threat and personal vulnerability are diluted by psychological defences like denial and avoidance. Such defensiveness is activated when an individual is confronted with information that is perceived to threaten their 'self-integrity' (Cohen and Sherman, 2014)

Contrastingly, 'self-affirmed' individuals, whose self-integrity is intact, are less susceptible to defensiveness. As such, people who receive threatening health-information after a self-affirmation procedure express greater intention to drink less, as well as actually reducing their consumption (Harris and Napper, 2005). This procedure therefore seems to have significant implications for treatment, especially since self-affirmation can be achieved through multiple, brief and simple means (Armitage and Rowe, 2011). By incorporating self-affirmation into an experimental web-based feedback 'intervention,' we predicted that, in line with the numerous lab-based demonstrations of efficient de-biasing of information-processing related to health threats, we would observe adaptive changes in drinking-related outcomes.

This study extended our previous work on web-based interventions ('Down-Your-Drink'), but focused in particular on whether such interventions could be enhanced through incorporating additional theory-based strategies.

Methods

Participants were 18-35 year old university students (n=528) who were drinking more than the DoH-recommended amounts (4 or more units for women; 5 or more units for men per day on most days). The entire recruitment and testing procedure was conducted online. Participants were automatically randomised to a self-affirmation (writing about a cherished personal value) or closely-matched control procedure (writing about someone else's values). They were then presented with threatening information related to the link between cancer and alcohol consumption in a manner intended to mimic brief web-based feedback interventions. The effects on intention to reduce alcohol consumption and actual drinking were assessed at one week and one month. In addition, the immediate effects of the threatening information were assessed only on the first online session and were determined using direct and indirect measures of perceived threat message acceptance, avoidance, and derogation.

Findings

The manipulation check and other indices of task engagement suggested that the self-affirmation and threat assessment procedures were effective and feasible using an online experimental platform. However, self-affirmation was not associated with any change in behavior. Other effects consistent with self-affirmation theory were seen only in men, who showed less message derogation (i.e. believing the health information was 'overblown'), and higher message engagement (as assessed by time spent viewing a threatening information page). These effects were reflected in statistical trends and were relatively small. Surprisingly, women in the self-affirmation group showed a reduction in intention to reduce alcohol consumption over time.

Implications

Online self-affirmation procedures may be feasibly integrated into eHealth treatments, such a web-based alcohol feedback interventions. However, the effects of such approaches may be significantly diluted relative to similar 'in-person' self-affirmation procedures. Moreover, the unexpected gender-related effects seen here may reflect either a characteristic of the population (university students who are hazardous or harmful drinkers) or the mode of delivery.

Gender effects have been largely neglected by self-affirmation researchers. However, it may now be time to investigate the potential for differential effects of self-affirmation according to gender, especially since self-affirmation has been proposed to potentially increase the efficacy of existing treatments (Ehret et al., 2015) and is incorporated into an eHealth intervention which is being trialed in a carefully-controlled study funded by the National Prevention Research Initiative (Epton et al., 2013). The latter provides an excellent opportunity to further investigate the dependency of self-affirmation effects on gender in a well-powered study.

Conclusion

Our findings suggest that self-affirmation effects in harmful/hazardous drinkers - at least when examined through a web-based procedure in university students - may depend on gender. Theory-consistent effects were seen on some measures in men, although women showed an unexpected reduction in intention to drink less. Future research on self-affirmation among heavy drinkers should examine gender effects, and determine whether potentially counter-productive effects are reliably observed amongst women.
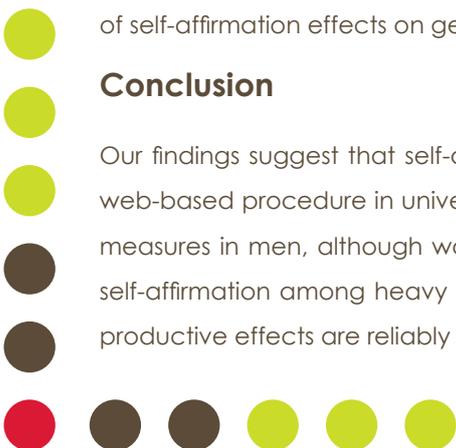
Further Information

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