Can Mindfulness Training Decrease Aggressive and Distracted Driving? Marcia Howell, Center for Safe Alaskans

Introduction

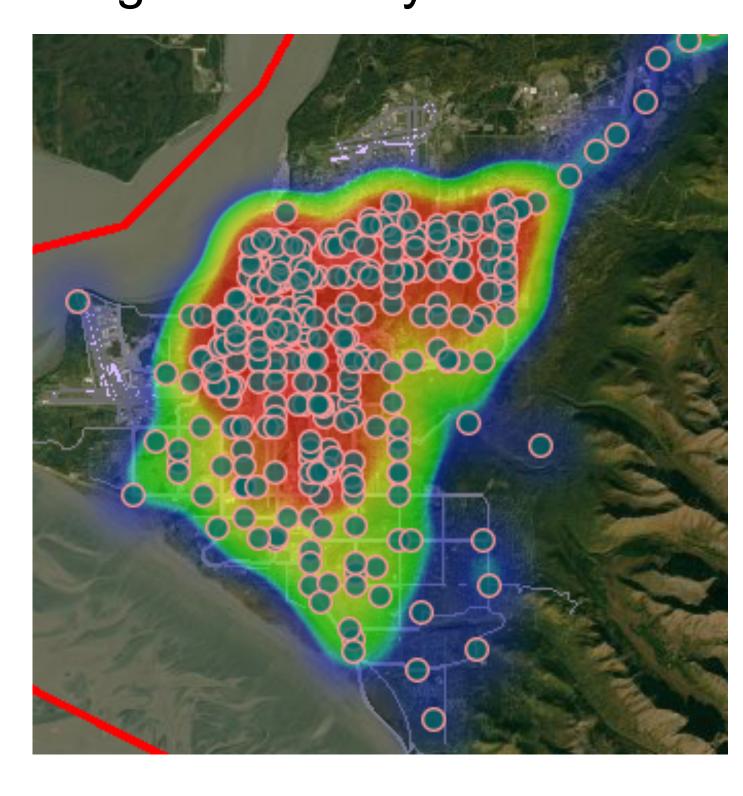
Self-regulation is a shared protective factor across multiple health concerns including substance misuse, suicide, and unintentional injury.

Practicing mindfulness increases a person's ability to self-regulate both behaviors and emotions. It improves emotion-regulation and acceptance of, but not reaction to, the current situations.

Mindfulness and self regulation are mentioned in strategies for multiple HA2030 indicators.

The Problem

Traffic crashes are a significant health concern in Alaska and around the world. The image below is a heat map showing where aggressive driving crashes occur in Anchorage. It is a city-wide concern.



Theory of Change

Research shows benefits of higher levels of mindfulness:

- Reducing anger driving through emotional self-regulation,
- Increasing attention and awareness of the moment, and
- Observing situations nonjudgmentally.





Aggressive Driving

Distracted Driving



Mindful Driving

As mindfulness increases, speeding, aggressive and distracted driving decrease.

The Plan

There is little research exploring the degree to which mindfulness training and practice can increase safe driving.

An Alaskan collaborative effort, with funding from the Safe States Alliance, is implementing a pilot project to begin to answer this question.

Pre and Post Evaluation

- A cohort of young drivers will participate in a driver simulation experience, measuring levels attention and reactions to various stimuli.
- They will also take an adolescent mindfulness scale survey, and answer some self report questions, including the 2 new self-regulation YRBS questions.

The Intervention

They will then participate in a series of mindfulness trainings and practice, following the Jon Kabat Zinn's methods.

The Future

Provided we see promising results from this pilot project, we plan to scale it up into a full research project.

We know mindfulness is a protective factor shared by many health concerns. It has only recently been linked to transportation safety. This initiative has potential for generating much broader health improvements.

The Team

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References

Koppel, S., Bugeja, L., Hua, P., Osborne, R., Stephens, A., Young, K., Chambers, R., Hassed, C. (2019). Do mindfulness interventions improve road safety? A systematic review. *Accident Analysis and Prevention*, 123, 88-98.

Feldman, G., Greeson, J., Renna, M., & Robbins-Monteith, K. (2011). Mindfulness predicts less texting while driving among young adults: Examining attention- and emotion-regulation motives as potential mediators. *Pers Individ Dif*, *51*(7), 856-861.