Drowning is the most common cause of death in recreational boating, accounting for 91% of canoer and 80% of kayaker deaths. Life jackets prevent at least 50% of drowning deaths for all boaters. Life jacket wear rates have remained consistently low for all boat types despite overall low hours of use for each boat nationally. Environmental, boat, and boater factors increase risk of drowning, and kayak boaters’ seeming perceptions of risk to overcome the idea that there is only a risk for drowning in certain conditions frequently in generally low risk situations observed in the study.

Methods

- 124 study sites (30 states) annually from 1999 - 2015
- Observations conducted by 2 observers in 4-hour blocks during Saturdays and Sundays in July and August

Results & Discussion

- Data were collected for 10,477 adult canoers and 14,367 adult kayakers
- Adult canoers had higher average rates of life jacket wear than kayakers in every situation observed (overall average: 76.3% vs. 27.4%, respectively)
- For both adult canoers and kayakers, in 10 of the 11 variables, life jacket wear rates in risky conditions were higher than in their less risky alternative
- As the number of boating risks increased, life jacket wear rates also increased (linearly) for both canoers and kayakers (Figure 3)
- Risk levels in trees have a stepwise additive effect: 56.9% spread (odds ratio: 13.6) in life jacket wear rates in risky conditions
- Adult canoers and kayakers have different life jacket wear rates both overall and in all individual boat, boater, and environmental situations observed in the study
- Life jacket wear promotional efforts should take into account the differences in both risks and behaviors related to the different types of boats
- People in canoes and kayaks appear to be conducting a mental assessment of risk to determine whether or not to wear a life jacket while boating
- Adult life jacket wear rates rise with increasing number of boat, boater, and environmental risks
- Boating accidents, injuries, and deaths actually occur more frequently in generally low-risk situations
- Future educational efforts should focus on changing adult canoe and kayak boaters’ seeming perceptions of risk to overcome the idea that there is only a risk for drowning in certain conditions
- Life jacket promotional efforts should teach that boaters should wear life jackets in all situations, not only those where there appear to be more risks

Data Sources, Funding, & Contact Information

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