

# Comparing Lifeguard Effectiveness In Low Versus High Income Community Pools

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## Introduction

For a range of reasons, children in low-income families experience unintentional injury more than children in higher income families. One factor in income-based injury disparities is environmental: low-income children are exposed to greater environmental risks. In other words, the risk for injury may be equivalent across socioeconomic groups if the environmental situation is equivalent.

## Objective

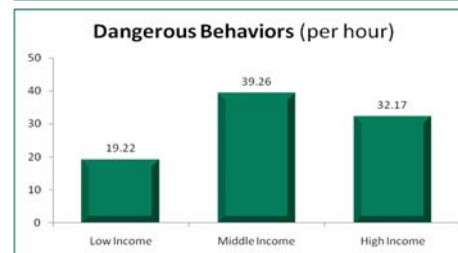
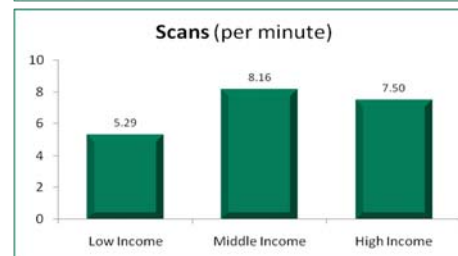
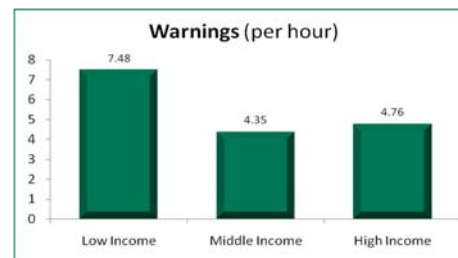
This study tested the influence of professional supervision on injury (drowning) risk across settings that were similar environmentally, but different socioeconomically. In general, swimming pool environments are structurally equivalent in all socioeconomic classes. Equivalent supervision strategies by lifeguards are also necessary to reduce drowning risk. This study examined lifeguard behavior and swimmer risk-taking at 12 structurally similar swimming pools in socioeconomically diverse communities.

## Methods

Twelve YMCA swimming pools in the Birmingham (AL) area participated. Average neighborhood income was estimated using United States Census reports. Observational data of lifeguard and swimmer behavior was collected using a structured behavior rating system (Schwebel, Lindsay, & Simpson, 2007). Three outcomes were considered: disciplinary warnings from lifeguards, visual scans by lifeguards, and risky swimmer behaviors.

## Results

Lifeguards at pools serving lower-income communities issued more disciplinary warnings than those serving middle and higher income neighborhoods. Despite more frequent warnings, they scanned the pool environment less frequently. Swimmers in lower income pools behaved in a risky manner less frequently. At higher-income pools, lifeguards scanned more frequently but swimmers behaved in more risky ways.



## Conclusion

Children in lower-income communities displayed fewer instances of risky behavior in community swimming pools that offer essentially identical environments to those in middle and upper income communities. The reduced risk-taking may be partially due to more frequent disciplinary warnings by lifeguards at lower-income community pools. Interestingly, the lifeguards at higher-income pools scanned the pool more often (even after controlling for people present). Results suggest the quantity of lifeguard scans may not be as important as the quality in reducing swimmer risk.

Our sample size ( $N = 12$  pools) caused statistical trends to fall short of statistical significance, but the results still educate translation to intervention. Lifeguard warnings might reduce swimmer risk-taking, and are more frequent in pools serving low-income communities. To ensure lifeguard surveillance is most effective for drowning prevention, the quality and result (e.g., disciplinary warnings) of scans must be emphasized along with the more simplistic goal of increasing rote scanning behavior by lifeguards.

## Reference

Schwebel, D. C., Lindsay, S., & Simpson, J. (2007). Brief report: A brief intervention to improve lifeguard surveillance at a public swimming pool. *Journal of Pediatric Psychology*, 32, 862-868.