

Aggression and Visors in the National Hockey League

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Ice hockey is inherently physical in nature, and physical contact is an expected and desirable part of the game.^{1,2} Because hockey is played on a closed surface at high speeds, there exists a significant risk of injury resulting from collisions with other players and objects. Of particular concern are injuries to the head or face, such as facial lacerations or eye injuries. In adult recreational leagues, helmets are almost always mandatory, but facial protection is often optional (as it is with the National Hockey League [NHL]). Considerable debate exists over whether visors should be mandated in order to reduce the occurrence of such serious injuries. Visors have been reported to reduce peripheral vision³ and fog up during the course of a game,⁴ while not offering greater protection against eye, face, and head injuries.⁵ Players also “look down” upon the visor, seeing lack of a visor as a sign of increased masculinity and toughness while also reporting that wearing one may make them a target for the opposition.⁶

In this issue of the *SMJ*, Woods et al⁷ found that facial protection does offer greater protection against facial and eye injuries, similar to our findings at the NHL level,⁸ supporting the conclusion that visors offer greater protection against such injuries, which contradicts previous findings.^{9,10} Of interest, they also report that 69% of players in their analysis believe wearing a visor allows them to play more aggressively. This question, however, remains largely unaddressed and has potential for future research.

To ascertain whether there is a relationship between aggression and having a visor, we reanalyzed our original research from the 2001–02 NHL season. To determine aggression rates, we included penalty minutes as a variable, which has previously been considered a measure of aggression.¹¹ If facial protection allows one to play more aggressively, a relationship between visors and penalty minutes could exist. We statistically compared the means between visor wearers and nonvisor wearers and found a significant difference ($t(575) = 6.02, P < 0.001$). Visor wearers ($M = 29.53, SE = 1.89$) had significantly fewer penalty minutes than nonvisor wearers ($M = 49.97, SE = 1.96$). Further dividing

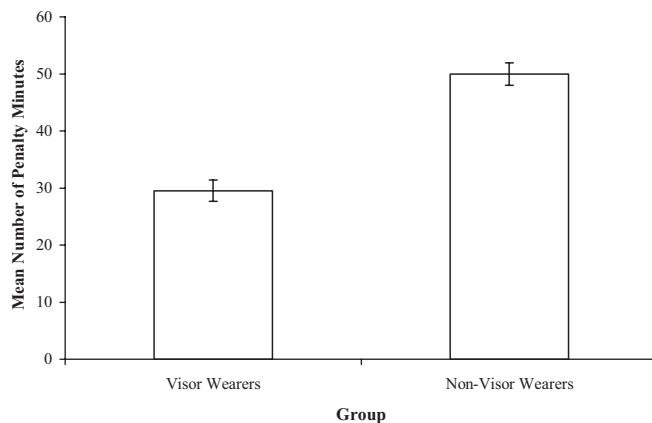


Fig. Number of penalty minutes for players wearing visors versus players not wearing visors. Those wearing visors had significantly fewer penalty minutes than those not wearing visors. Error bars represent standard error.

penalties into minor and major, there was no difference for minor ($P > 0.10$), but there was for major penalties ($P < 0.006$). Visor wearers also had fewer game misconduct penalties ($X^2(1) = 11.38, P < 0.02$) and (using a multivariate analysis of variance) had more: games played, goals, assists, points, total time on ice for the season, time on ice per game, and shifts per game (all values of $P < 0.001$). These findings suggest that visor wearers are less aggressive than nonvisor wearers. Visor wearers also receive more playing time both within a single game and over the course of the season, suggesting that the greater rate of sprains and strains may be a result of increased exposure rather than increased aggressiveness. The suggestion that a visor may make one a target of the opposition cannot be addressed by this analysis, and future studies should explore this possibility (Fig.).

Woods et al⁷ also present a number of other interesting findings that suggest directions for future research, particularly in the psychological domain. Players with facial protection were more likely to have seen a physician for an injury and were also more likely to see a specialist physician. Perhaps players choosing to equip with facial protection possess higher levels of anxiety and/or are just more cautious than nonvisor wearers in general. It may also be prudent for researchers to attempt to differentiate whether facial and eye injuries are the result of acts of aggression or the results of random game occurrences (eg, having one’s eye lacerated accidentally by a teammate’s stick). Considering their findings in conjunction with ours at the National Hockey League level, we would agree that it is indeed cost-effective to require facial protection of all adult ice hockey players. While visor wearers may incur more minor injuries, such as sprains or strains, the seriousness of facial, and particularly eye injuries, coupled with the potential for visors to provide greater protection against such injuries outweigh the costs.

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Despite advocating greater protection, it is certainly possible that less aggressive hockey players choose to wear visors and that this is the cause of the reduced number of aggressive penalties. Future research should focus on this possibility. However, given the reduction in eye injuries at the NHL level, it is surely prudent to suggest that the visor be seriously considered as protection at all levels.

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Please see “Is it Cost-Effective to Require Recreational Ice Hockey Players to Wear Face Protection?” on page 991 of this issue.

“Never regret. If it’s good, it’s wonderful. If it’s bad, it’s experience.”

—Victoria Holt