

# The Perception of Instant Replaying System in Sport: Fair or Fun?

Kim, Minjung<sup>1</sup>; Kim, Amy Chan Hyung<sup>2</sup>; Sung, Yoon Tae<sup>3</sup>

<sup>1</sup>East Stroudsburg University, USA; <sup>2</sup>Florida State University, USA; <sup>3</sup>University of Northern Colorado, USA

E-mail: mkim5@esu.edu

## Aim of the research

In sports, every decision made by referees, and even a referee's single decision can be very influential in final game results. There have been many attempts to create a better system of judgment, and one of the most effective ways was to start using technology in sports. However, there have been controversial views concerning whether using technology in mediated sports, especially for an instant replay system (IRS), can interrupt the flow of games. In terms of the implementation of an IRS in sport, the current study provides a conceptual framework to answer two research questions: (1) what is the role of utilizing IRS for viewers' perceived fairness and enjoyment? (2) what are the factors changing the levels of viewers' perceived fairness and enjoyment in the context of utilizing IRS?

## Theoretical background

To the contemporary sports viewers, the use of technology is potentially one of the most crucial components to maximize their viewership (Cummins & Hahn, 2013). The introduction of an IRS contributed to transforming time (e.g., slow-motion re-presentations of play) and space (e.g., close-up play with different perspectives; Mullen, & Mazzocco, 2000) for viewers, creating a unique media consumption experience compared to live spectatorship. There are three types of facilitating technology in sports (Leveaux, 2010): (1) post-game match analysis, (2) specific incident review during the match, and (3) off-field referee's advice to center referee during the match. Among these types, specific incident reviews during the match may influence the flow of games because it requires stopping the game for immediate action to the challenges.

## Research design and data analysis

Our conceptual framework consists of three main components. First, the proposed conceptual model includes the proposition that utilizing the IRS influences both levels of the viewers' perceived fairness and enjoyment, which can be explained by "openness" and "hedonism", respectively. The results of Lee and Trail's (2007) study showed that values of openness and hedonism were antithetical to each other, so they may be unrelated or negatively correlated. On the one hand, utilizing the IRS is more likely to increase the levels of sport media consumers' perceived fairness. On the other hand, using the challenge system may be disruptive where there is a very dynamic game, so viewers' enjoyment level may be decreased. We assert that the application of the IRS contributes to increase viewers' perceived fairness and decrease enjoyment level.

Second, the proposed conceptual model includes intrapersonal characteristics, which possibly impacts the relationship between utilizing IRS and sport media consumer outcomes (i.e., team identification and the current status of knowledge on a certain type of sport). Because highly identified fans are more likely to report favorable evaluations of their team performance (Dietz-Uhler & Murrell, 1999), the level of perceived fairness can differ from viewers' team identification level. In addition, viewers with high levels of knowledge about a specific sport, a team, or a player are more likely to enjoy the games when specific interpretations of challenging moments during matches are provided through using IRS.

Third, the conceptual model includes two contextual factors, potentially influencing media consumer outcomes; regulations and forms of IRS. Each sport has different regulations for IRS in terms of the initiator of the challenging request (e.g., replay administrator, coach, or player) and the numbers of challenges allowed. For example, some players or coaches use the request of the immediate video analysis tactically and intentionally for interrupting the flow of games rather than for correcting referee's unfair judgments (Leveaux, 2010). The other contextual factor is the various forms of IRS (e.g., slow-motion, replay showing various angles, or analytic video software). Different forms of IRS in sports include a line call in tennis, whether a ball crossed the goal line in football, points for head kicks in taekwondo, and foul balls/homeruns in baseball.

## Results, discussion, and implications/conclusions

We highlight the role of utilizing IRS in media consumers' perceived fairness and enjoyment arguing that these influences can be different according to sport media consumer's intrapersonal characteristics (i.e., team identification and the current status of knowledge) and contextual factors (i.e., regulations and forms

of IRS). During the poster presentation, we will discuss the implications in detail with cases (e.g., hawk-eye system in tennis, wireless scoring system in taekwondo).

## References

- Cummins, R. G., & Hahn, D. (2013). Re-presenting Sport: How Instant Replay and Perceived Violence Impact Enjoyment of Mediated Sports. *Mass Communication and Society, 16*, 787–807.
- Dietz-Uhler, B., & Murrell, A. (1999). Examining fan reaction to game outcomes: A longitudinal study of social identity. *Journal of Sport Behavior, 22*(1), 15–27.
- Lee, D. & Trail, G. T. (2007). *Development and validation of the value and goal typology scales*. Unpublished manuscript.
- Leveaux, R. R. (2010). Facilitating Referee's Decision Making in Sport via the Application of Technology. *Communication of the IBIMA*, Article ID 545333.
- Mullen, L. J., & Mazzocco, D. W. (2000). Coaches, drama, and technology: Mediation of Super Bowl broadcasts from 1969 to 1997. *Critical Studies in Media Communication, 17*, 347–363.