The Rise of Robot Journalism: Can Robot Reporters Replace Human Reporters in Sports?

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The popularity of robot journalism has been rise in media practice. For example, Associated Press has begun to create sports news through the use of computational algorithms and artificial intelligence. In the journalism literature, evidence has suggested that the use of robot reporters (RR) enhances the credibility of the news stories because robots are free from human bias (Wölker & Powell, 2018). Thus, readers evaluate the news articles more favorably when the story is written by (RR) than human reporters (HR; Carlson, 2015). However, in the context of sports, we posit that the RR may not be the best option to write news stories. In sports news, emotion plays a key role in persuading sports consumers to positively evaluate the story (Chang, 2019). In this regard, RR can heavily neglect the emotional aspect of sports which plays a major role in sports. Thus, we propose the following hypothesis:

H1: Sports fans would evaluate the news story more credible when RR writes the sports news compared to HR

H2: Sports fans would experience greater degrees of (a) emotional involvement, (b) reading satisfaction, and (c) future intention to subscribe the news channel when HR writes the sports news compared to RR

In general, two different structures have been used to create news stories. In particular, analytic format focuses on rule and fact and is often driven by data, whereas narrative format is based on storytelling and transportation (Escalas, 2007). Thus, we propose that the effects of robot versus human reporters would be further determined based on the format of sports news.

H3: For analytic framed news, sport fans would evaluate the news story (a) more credible and experience greater (b) reading satisfaction, and (c) future intention to subscribe the news channel when RR writes the story compared to HR

H4: For narrative framed news, sport fans would evaluate the news story (a) more credible and experience greater (b) reading satisfaction, and (c) future intention to subscribe the news channel when HR writes the story compared to RR

This study uses a 2 (Type of Reporter: HR vs. RR) × 2 (Format Type: Analytic vs. Narrative format) × 3 (Sports Type: Baseball vs. Football vs. Basketball sports news) between- and within-subjects design (n = 200). Three different types of sports news will be used as a within-subjects variable to increase the generalizability of the finding.

We are currently working on the data collection by recruiting participants from national research company (https://www.simpleopinions.com/), and will finish the data collection and analysis by November. In the experiment, participants will be first randomly assigned to either HR or RR condition. Second, participants will read three different sports news that are either framed as analytic or narrative format. After reading each news, participants will complete the questionnaire.

The results of our study would provide the first empirical evidence regarding how sport fans evaluate the news stories differently depending on the type of authorship (RR vs. HR). Theoretical and practical implications for robot journalism in sports will be discussed at the presentation.