Audiences’ Experiences in Watching Telecasted Sport Games and the Recent Transformation in Media Technology

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The media industry has witnessed a rapid development in communication technologies in recent years; such a trend has been transforming the ways people consume media contents at an unprecedented rate. It is not surprising that the large, flat-panel televisions with their vividness and brightness ever improving have been replacing the old Braun-tube televisions, which have remained in the market for almost a century since the invention of television in the early 1900s. Now, high-definition (HD) images are becoming common, and three-dimensional (3D) images seem to be the next generation of media technology to be commonly used by the general public in just a few years.

With the rapid development in media technology, mediated sport games give us great opportunities to examine how and why technology-driven perceptions and feelings would influence audiences’ enjoyment from watching the mediated sport games. In particular, the 2010 FIFA World Cup held in South Africa was an excellent opportunity to investigate the influences of media technology on audiences’ experiences while watching sport games, because the games were televised to movie theaters equipped with 3D display features, in addition to the regular telecasts to each television household in the nation.

We draw upon literature on sport management, as well as that on communication and media technology, to propose that two categories of factors—media-technology-driven factors and game-driven factors—play important roles in shaping audiences’ levels of enjoyment experienced while watching mediated sport games (Bracken 2005; Armstrong 2008). In particular, it was hypothesized that audiences’ sense of presence, comprised of realism, immersion, and vertigo, will positively influence, along with the influence of perceived game attractiveness, the audiences’ feelings of suspense, and that the perceptions of suspense will in turn positively influence the degrees of enjoyment experienced while watching the sport games (Caro & Garcia 2007; Peterson & Raney 2008).

In order to examine the above hypotheses, a survey was administered by a professional research company with a nationally representative sample of 240 adults in Korea. The data collected from the survey were analyzed using a structural equation modeling method. A two-step model-building approach that tests the measurement model before examining the hypothesized structural model was adopted (Anderson & Gerbing 1988). Both the measurement and the structural models were fitted to a covariance matrix constructed from the correlations and standard deviations, using Mplus 5.2.

The measurement instrument was validated by a confirmatory factor analysis (CFA) with the six latent factors, measured by 18 items. It appeared that the data fit the proposed measurement model well, as indicated by multiple fit indices within the recommended range: $2(120) = 203.38, p < .05; \text{NC} = 1.69; \text{CFI} = .97; \text{TLI} = .96; \text{RMSEA} = .05; \text{SRMR} = .04$ (Hu & Bentler 1998). In addition, all the factor loadings were statistically significant, and the internal consistency reliability of the scale items fell within an acceptable level for each factor. The inter-factor correlation ranged from the lowest, .06 between perceived realism and vertigo, to the highest, .76 between perceived suspense and enjoyment. Although correlations between factors were rather high, a series of Wald chi-square tests indicated that no two factors were correlated perfectly and that discriminant validity was achieved among them (Bagozzi & Phillips 1982). Taken together, the findings show that the reliability and validity of the measurement instrument are satisfactory.

Given an acceptable measurement model, the goodness-of-fit for the hypothesized structural model was examined. There were four exogenous variables (perceived realism, immersion, vertigo, and game attractiveness), and two endogenous variables (perceived suspense and enjoyment). All the exogenous variables were allowed to correlate. The analysis converged to an admissible solution. It appeared that the hypothesized structural model fitted the data reasonably well: $2(124) = 236.24, p < .05; \text{NC} = 1.91; \text{CFI} = .95; \text{TLI} = .94; \text{RMSEA} = .06; \text{SRMR} = .05$ (Hu & Bentler 1999). Also, in support of five of the six hypotheses, the path coefficients from perceived realism ($r = .29, p < .01$),
perceived immersion ( = .72, p < .01), and perceived game attractiveness ( = .42, p < .01) to the perceptions of suspense were positive and were statistically significant at p = .05 or less; also the path from perceived suspense to the degree of enjoyment ( = .84, p < .01) while watching mediated sport was positive and significant. Contrary to the prediction, however, perceived vertigo ( = .06, n.s.) did not have systematic association with the perceptions of suspense, disconfirming a hypothesis. In terms of the relative strength of the paths, the path from the perceived suspense to enjoyment appeared to be the strongest path, while the path from the perceived realism to the suspense appeared to be the weakest.

Overall, the findings suggest that the sport media industry can benefit from the advancement of communication technologies in such a way that the more advanced the media technologies are, the more likely an individual will enjoy watching a mediated sport. Limitations and future research directions are discussed.