The Effects of Image on Satisfaction and Behavioral Intentions of Spectators of Women’s Korea Football League

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The Women’s Korea Football League (WK-League) has struggled to attract and keep spectators with just an average of 535 spectators per game in the 2009 season (Korea Women’s Football Federation, 2010). The Korean sport market is now saturated with existing professional leagues for a variety of sports and it is imperative for sport marketers of the WK-League to better understand the variables affecting sport consumption behaviors to improve the quality of product offerings. Specifically, the WK-League needs to understand spectator characteristics, psychological orientations, and consumption behaviors through surveying the existing spectators. This type of research would provide academicians and practitioners with preliminary, yet important, information about WK-League fan characteristics.

Prior studies have found significant impact of brand image on sport consumption behaviors (e.g., Chavanat, Martine, & Ferrand, 2009; Ross, James, & Vargas, 2006). Studies have also tested the effect of brand image on sport consumer behaviors at events for FIFA World Cup Soccer (Chavanat et al., 2009), college hockey (Ross, Maxwell, & Walsh, 2009), men’s soccer league (Kim, Kim, & Lee, 2006; Koo, 1998), and professional basketball (Koo, 1998; Kwak & Kang, 2009). All of these previous studies confirmed that image was a crucial factor impacting consumption behaviors. However, there is a dearth of research on the impact of brand image on spectators of women’s sports. This study was designed to fill that void by examining the effect of brand image on various service evaluation and consumption variables, including satisfaction, repurchase intention, and recommend to others in the context of WK League.

Cross-sectional design using a survey method was used to recruit the study participants. The sample for the current study was spectators attending the 2010 WK-League held in Busan, Korea. A total of 400 questionnaires were collected. Of those, 46 were discarded due to too many missing values. To measure image toward WK-League, a four-factor image model developed by Koo (1998) was adapted that included behavioral (5 items), psychological (12 items), emotional (8 items), and negative (4 items). All items were measured on a 5-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. Three service evaluation variables were measured, including satisfaction (8 items; Kim, 2007), repurchase intention and recommend to others (Zeithaml, Parasuraman, & Berry, 1996) that were measured using a single item.

Procedures from SPSS were used to conduct statistical analyses. Descriptive statistics were calculated for image variables, satisfaction, repurchase intention, and recommend to others. For examining factor structure of the four-factor image model and the uni-dimensional satisfaction, an exploratory factor analysis using Principal Axis Factoring and Oblimin rotation were used via SPSS 18.0. The Cronbach’s alpha values were calculated to determine the factor reliability. Once the psychometric properties of the model have been confirmed, a series of multiple regression analyses were conducted using the forced entry method (Studenmund & Cassily, 1987) to examine the relationship between the four-factor image model and the three service evaluation variables. Composite scores were created for all multi-item measures.

Mean values for three image factors (behavioral, psychological, and emotional) were above 2.5, which was the mid-point on a 5-point Likert scale, indicating image toward the WK-League was positive. The mean score for the negative factor was 2.6, which was interpreted neutral, while mean values for the service evaluation factors were 2.9 (satisfaction), 3.9 (repurchase), and 3.9 (recommend to others), indicating spectators were highly satisfied with the WK-League and had high desire to consume the sport, and to highly promote the League through word-of-mouth. Results of an initial factor analysis showed that five variables in the image factors loaded on more than one factor, suggesting the variables eliminated from the model (Field, 2009). Prior to conducting another factor analysis using 24 items under the same four factors, the assumption test by means of Kai Olkin (KMO) and Bartlett’s Test of Sphericity (BTS) was conducted to examine if the factor analysis was appropriate. The KMO measure of sample adequacy was .92 and the BTS value was 4742.30 (p < .001), indicating the sample was adequate and the items of the four factors had sufficient correlations for factor analysis. Using the Kaiser’s (1974) suggested criterion of Eigenvalues greater than 1, a four-factor solution provided the clearest extraction. The Scree plot also supported for the four-factor model. All items loaded only one factor, and item loadings were above .50, ranging from .52 to .84. The model explained a total of 62.72% of the variance. The KMO (.88) and BTS (1273.01; p < .001) for the satisfaction construct were found to be adequate for factor analysis. Therefore, the 8-item uni-dimensional satisfaction model was subject to factor analysis, and it was
found that the model was confirmed as uni-dimensional with a total variance of 54.73% being accounted for. The item loadings ranged from .68 to .79. As a result of the reliability test, the four subscales along with the satisfaction all had above the suggested criterion of .70 (Cronbach, 1959), showing the items of the four-factor image model and satisfaction model had internal consistency.

Having the satisfied psychometric properties, it was appropriate to proceed with multiple regression analyses. The first regression model had the four image factors as independent variables and satisfaction factor as dependent variable. The model revealed that the combination of variables significantly predicted satisfaction $F(4, 349) = 54.95, p < .001$, accounting for 38% of the variance, which is a large effect size (Cohen, 1988). The beta weight indicated that emotional ($\beta = .27, p < .001$) contributed most to predicting satisfaction, followed by psychological ($\beta = .25, p < .001$), and behavioral ($\beta = .22, p < .001$). The second regression model had the four image factors as IVs and repurchase intention as DV. The model was found to significantly predict repurchase intention $F(4, 349) = 14.69, p < .001$, accounting for 13% of the variance, which is a medium effect size (Cohen, 1988). Two image factors, including psychological ($\beta = .27, p = .003$) and negative ($\beta = -.26, p < .001$) were found to be related to repurchase intention. The final regression model had the four image factors as IVs and recommend to others as DV. The model significantly predicted recommend to others $F(4, 349) = 12.86, p < .001$, explaining 12% of the variance, which is a marginal to medium effect size (Cohen, 1988). Like the second model, the same two factors, psychological ($\beta = .24, p = .001$) and negative ($\beta = -.21, p < .001$) were found to be significantly associated with recommend to others. Assumption tests, including independent errors and multicollinearity were found to be tenable for all three models.

In the current study, all four image factors were found to have relative influences on service evaluation variables. To enhance consumer satisfaction, marketers of WK League should adopt a communication strategy that focuses on aspects such as emotional, psychological, and behavioral. Negative image should be avoided as the factor had no significant relationship with satisfaction. Likewise, a strategy emphasizing psychological and negative image (i.e., inverse relationship with consumption variables) would increase game consumption. The findings from this study would allow marketers of WK League to identify the image dimensions that best and least explain sport consumption behaviors.