

**Spectator anxiety and self-esteem: A case of the 2008 Taiwanese Professional Baseball Series**

*Chih-I J. Chien, National Taipei University*

*Stephen D. Ross, University of Minnesota*

**Marketing**

**May 28, 2009**

**25 minute oral**

**Abstract 2009-017**

**10:45 AM**

**(Richland C)**

Given the importance of having a sizeable fan base for professional sport teams, the majority of past research has largely addressed fan identity and loyalty (Wann & Grieve, 2005; Jacobson, 2004; Funk & James, 2001; Kolbe & James, 2000; Murray & Dietz, 1992; Wann & Branscombe, 1993, 1990). However, only few studies have focused on the psychological reactions of loyal fans toward a sporting event. While researchers often focus on examining the correlation between psychological wellbeing and fan identity (Wann, 2006; Zillmann, Bryant, & Sapolsky, 1989; Curtis, Loy, & Karnilowicz, 1986), the intense reaction of fans towards a sporting event is often ignored. Although many researchers suggest that sport fandom and spectator behavior can enhance psychological wellbeing (Curtis et al., 1986; Giamatti, 1989; Grove, Prapavessis, & Dodder, 1982; Iso-Ahola & Hatfield, 1986; Smith, 1989; Smith, Patterson, Williams, & Hogg, 1981), others have found that after highly identified fans witness a loss or poor performance by the team they support, they may suffer from depression (Eastman & Riggs, 1994; Hirt, Zillmann, Erickson, & Kennedy, 1992; Lever, 1969), anger (Quirk, 1997), decreased satisfaction at work (Schwarz, Strack, Kommer, & Wanger, 1987) and lower mental and social skills (Hirt et al., 1992). The aforementioned negative effects are linked to anxiety (Eysenk & Calvo, 1992), which has also been found among die-hard fans witnessing an important sport event (Banyar & Shevlin, 2001; Wann, 1998).

Loyal fans are often viewed as being allegiant to the team they support, and the Psychological Continuum Model (Funk & James, 2001) suggests that the allegiance stage is at the higher end of the internalization continuum. According to Kolbe and James (2003) the internalization process contains three stages; 1) the initial stage, 2) the identification stage, and 3) the optimal internalization stage. Fans at the optimal internalization stage psychologically give up their self-identity and integrate the team within their self-concepts (James & Ross, 2002). As a result, team performance becomes a central part of the ego and may lead to anxiety when consuming an important game involving the team they support. Although researchers have suggested that BIRGing and CORFing are the defense mechanisms utilized by loyal fans to protect their ego after a team success or failure (Cialdini, Borden, Thorne, Walker, Freeman, & Sloan, 1976; Wann, Hamlet, Wilson, & Hodges, 1995; Snyder, Lassegard, & Ford, 1986), some state that highly identified fans do not decrease their association with a team they support even when the team is unsuccessful (Sloan, 1979; Wann & Branscombe, 1990). Past research regarding spectator anxiety and BIRGing/CORFing tendencies has mainly focused on sports fans in the United States (Wann, Schrader, Michael, & Adamson, 1998; Wann & Branscombe, 1990), however, no such research regarding sports fans has been conducted in Taiwan.

As such, the purpose of the study was to examine the relationship among spectator anxiety, BIRGing and CORFing tendencies, and internalization levels of sport fans in Taiwan. The specific research questions that were generated for the current study were; 1) How do anxiety levels differ across different levels of internalized professional baseball fans in Taiwan? and 2) What are the BIRGing and CORFing tendencies of Taiwanese professional baseball fans after an important game?

In order to measure the anxiety level and the BIRGing/CORFing tendencies across different levels of internalization, a pre/post-test research design including a total of four survey administrations was employed in this study. A total of 304 usable surveys were collected from 14 universities across Taiwan. Subjects were asked to participate in four survey administrations periods (pre, during, and post) during the 2008 Chinese Professional Baseball Championship Game Series (Taiwan Series). Specifically, the first survey administration took place three days before the Taiwan Series started. The second and the third administrations were taken place 15 minutes prior to and after the fourth inning of the fourth game of Taiwan Series. The last administration occurred three days after Taiwan Series ended. Four sets of randomized questionnaires were used as research instruments in this study in order to prevent learning bias among respondents.

The survey for the first administration contained three sections of items measuring internalization levels, anxiety levels, and demographic information. Four 7-point Likert-type scale questions ranging from Strongly Disagree (1) to Strongly Agree (7) were included in the internalization scale. The anxiety inventory contained 27 four-point Likert-type scale questions ranging from Not at All (1) to Very Much (4) measuring three constructs (cognitive anxiety, somatic anxiety and team-related confidence of spectator anxiety). Demographic questions were also included to assess gender of survey respondents and the teams they support. The survey used in administration two, which only measured the spectator anxiety, was identical to trial three but with different item orders. The survey used in the last trial included three sections measuring internalization levels, anxiety levels, and the BIRGing/CORFing tendencies of the respondents after Taiwan Series. The items measuring internalization were adapted from Baseball Survey Form (James & Ross, 2002), while the spectator anxiety items were adapted from The Competitive State

## **2009 North American Society for Sport Management Conference (NASSM 2009)**

Anxiety Inventory-2 (Martens, Burton, Vealey, Bump & Smith, 1990). Items measuring BIRGing and CORFing tendencies of fans were adapted from the work of Wann, Schrader, Michael, Adamson, and Danny (1995).

Confirmatory factor analysis (CFA) was used to assess the validity and reliability of the survey items. A combination of analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA) procedures were used to assess the research questions. A complete analysis and further discussion of the results will be presented along with implications and suggestions to the sport marketers and professional baseball teams in Taiwan. Key words: spectator anxiety, internalization, BIRGing, CORFing