Spectators’ Flow Experiences and Life Satisfaction: The Interplay of Emotions and Implicit Team Identification

Yonghwan Chang, Texas Tech University
Semih Yilmaz, California State University
Yong Jae Ko, University of Florida
Daniel Wann, Murray State University

Introduction
During a sport game, spectators often experience a state of flow (Csikszentmihalyi, 1997), which is characterized by time distortion, loss of self-consciousness, or the sense of the surroundings due to their excessive concentration and absorption into the game. Even though the concept of flow has received increasing attention over the decades, research that has explored the antecedents and consequences of flow in the contexts of spectator sports is scarce. Accordingly, the current study examines i) the emotional determinants of flow in sport spectatorship, ii) the interaction effects of emotions and implicit team identification on flow, and iii) the effects of flow on spectators’ life satisfaction.

Theoretical background and hypotheses
The concept of being in flow originates from studies on what motivates people to devote more time to certain activities such as watching a favorite team’s game (Manzano et al., 2010). The common denominator inducing the flow state appears to be the intrinsically rewarding experiences people have when they are deeply involved in such activities (e.g., enhanced self-esteem through vicarious achievement in spectator sports). Flow has been, by definition, associated with positive emotions such as joy (Csikszentmihalyi, 1997; Hamann, 2012; Roy et al., 2008). Inversely, negative emotions inhibit flow (Ullen et al., 2012). For example, Asakawa (2010) suggested a negative correlation between flow proneness and anxiety. Recently, scholars found that some negative emotions may also activate the state of flow because of the psychological (e.g., heightened and unforced concentration; De Manzano et al., 2010; Roy et al., 2008) and physiological distinctions of flow (e.g., increased blood pressure and heart rate variability; De Manzano et al., 2010). For example, a certain degree of anger and fear causes increased respiration, heart rate, and blood pressure (Henry, 1986). At the same time, these negative emotions have been found to produce unforced concentration without high cognitive load (Hamann, 2012). Therefore, it is hypothesized:

H1: Both positive and negative emotions positively influence flow.

In the context of spectator sports, team identification may be an important factor that explains the variation in flow. Flow occurs when spectators are fully engaged (Asakawa, 2010; Seligman, 2002), deeply involved (Csikszentmihalyi, 1997), and have devoted motivation (Manzano et al., 2010). Typically, such behaviors can be seen among spectators with high identification. Therefore, it is expected that:

H2: Spectators’ team identification interacts with emotions in producing flow. The effect of emotions on flow is higher for highly identified fans compared to general spectators.

The state of being in flow has also been described as effortless (Douglas & Hargadon, 2000; Ullen et al., 2012) and nonconscious (Peterson et al., 2005) mental state. Based on the basic tenet of dual-process models, we assume that effortless (Petty et al., 1983), heuristic (Eagly & Chaiken, 1984), and implicit (Gawronski & Bodenhausen, 2006) mental processing mechanisms may largely account for the state of being in flow, rather than effortful/systematic/explicit processing. Therefore, by adopting the implicit and explicit dichotomy of the dual-process mechanism suggested in the associative-propositional evaluation model (Gawronski & Bodenhausen, 2006) we define implicit team identification (Implicit Team ID) as individuals’ stable representations of self-concept that is shaped without conscious awareness but stemming from long-term group membership experiences with a particular
sport team. Against this background, we expect that:

H3: Implicit team identification, rather than explicit one, better accounts for the state of being in flow.

Being in flow, as an optimal state of fully engaged experience (Seligman, 2002), has been suggested to achieve personal growth as well as improved quality of life (Csikszentmihalyi, 1999; Nakamura & Csikszentmihalyi, 2002, 2008). Moreover, Asakawa (2010) and Seligman (2002) suggested that flow proneness is positively related to life satisfaction. Therefore, it is hypothesized:

H4: The more spectators experience flow in a sport game, the more satisfied they are with their lives.

Method

Through Qualtrics panels, we recruited 572 responses who attended a particular college football game. The online survey was distributed right after the end of the game, and the participants were asked to respond to a series of measures including implicit team identification, explicit team identification (Wann et al., 2001), six basic emotions (Ekman, 1992), flow (Jackson & Eklund, 2004), and life satisfaction (Burroughs & Rindfleisch, 2002). In particular, in the current study, the researchers developed team identification implicit association test (Team ID IAT) by adopting and modifying Chang and Ko’s (2016) single target IAT, which originated from Greenwald et al. (1998). The Team ID IAT was programmed and presented by the INQUISIT millisecond software package (Inquisit 5 Web). Stimuli of the Team ID IAT used in the current study included: (1) four pictures of a target team displaying team logo or mascot, (2) four us-referent words including we, our, us, and ourselves, and (3) four them-referent words including they, their, them, and themselves. The Team ID IAT was comprised of three separate blocks including one practice block and a pair of combined-task blocks. In the first block, participants practiced classifying the eight words into “us” and “them” categories by pressing keys “e” or “i.” Within the two combined-task blocks (i.e., 2nd and 3rd blocks), if the stimuli of the target team were grouped with the “us” category in the 2nd block, they were grouped with the “them” category in the 3rd block. The order of the 2nd and 3rd blocks was counterbalanced across participants.

Results and Discussion

To test the moderated mediation effects, we performed multiple group structural equation modeling (MGSEM) and follow-up linear mixed modeling. Measurement invariance tests were performed before implementing MGSEM. The results of MGSEM showed an acceptable fit to the data ($\chi^2$/df = 20.41/12 = 1.7, p = .06, RMSEA = .06, CFI = .99, TLI = .98, SRMR = .02 for the moderation of implicit team ID; and $\chi^2$/df = 29.34/12 = 2.45, p = .004, RMSEA = .08, CFI = .99, TLI = .97, SRMR = .01 for the moderation of explicit team ID). Positive (i.e., joy) and negative emotions (i.e., fear and anger) significantly and positively influenced flow, supporting H1. Spectators with higher implicit and explicit team identification were more likely to experience flow. For the spectators with higher implicit team identification, the three emotions (i.e., joy, fear, and anger) significantly and positively influenced flow.

However, for the group of spectators with higher explicit team identification, only the positive emotion of joy significantly and positively predicted flow (β = .43). Similarly, for those with lower implicit (β = .19) and explicit team identification (β = .24), the positive emotion of joy was the only predictor of flow. Therefore, H2 was partially supported. Considering the direct effects of implicit and explicit team identification on flow, we conclude that implicit measure better accounted for flow especially for the group of spectators with higher identification (high implicit team ID: $f^2 = .59$). However, spectators with low identification, explicit measure showed a greater explanatory power (low explicit team ID: $f^2 = .47$), thus H3 is partially supported. Regardless of implicit or explicit team identification, the more spectators experienced flow, the higher was their life satisfaction, supporting H4. The current study contributes to the sport consumer literature by examining emotional determinants of flow corresponding to implicit and explicit team identification. Further theoretical and practical implications associated with meta cognitive accounts of emotion, flow, and identification will be discussed.