Examining the capacity of spectator sport to facilitate psychological recovery after a disaster

Authors: Yuhei Inoue, Daniel Funk, Makoto Nakazawa & Masayuki Yoshida
E-mail: yinoue@memphis.edu

Abstract keywords
Social impact, psychological benefits of sport, disaster, psychological recovery, team identification

Aim of the study
Spectator sport has the potential to facilitate recovery among community residents affected by a severe disaster. For example, in referring to the victory of Japan women's national football team at the 2011 FIFA World Cup, a victim of the March 11 earthquake noted "I felt they were telling us never give up and get on with recovering from the disaster" (The Daily Yomiuri, 2011, para.12). Despite such claim, research has yet to provide empirical support for this potential of spectator sport. The purpose of this study, therefore, is to examine how psychological and socio-psychological factors associated with spectator sport are related to resident psychological recovery in the context of the March 11 earthquake in Japan.

Theoretical background
Various psychological and socio-psychological factors have been shown to predict one's level of psychological recovery after a disaster (e.g., Norris et al., 1999; Norris & Kaniasty, 1996). For example, the higher level of self-esteem an individual has, the less likely s/he is to experience depression after a disaster (Norris et al., 1999). Individuals also tend to overcome stress from a traumatic event when they perceive that social support is available to them (Norris & Kaniasty, 1996).

Importantly, the effect of spectator sport on some psychological and socio-psychological factors has been identified in the sport management literature, indicating its potential to contribute to one's mental wellbeing (e.g., Funk et al., 2009; Wan, 2006). Specifically, research on team identification shows that a sport team can serve as a social group with which people identify, satisfying their socio-psychological needs (Wann, 2006). Furthermore, attending a sport event provides individuals with psychological benefits, such as increased self-esteem and sense of social connectedness (Funk et al., 2009). Consequently, this study hypothesizes that residents' levels of identification with a local team and perceived benefits generated from attending its event are positively associated with their levels of psychological recovery from the earthquake.

Methodology
A survey was conducted at a professional football game in October 2012 in an eastern Japanese city that experienced substantial damage from the March 11 earthquake. The survey included measures on: participants' demographics,

levels of identification with the home team (Trail & James, 2001), perceived psychological benefits of spectator sport in terms of (1) self-esteem and (2) social engagement (Funk et al., 2009), degree of exposure to the earthquake (Norris et al., 1999), and levels of mental health (a proxy for psychological recovery; Ware et al., 1996). For the main analysis, this study performed a multiple regression testing the effects of team identification and the two benefits of spectator sport on resident mental health after controlling for three demographic variables (i.e., gender, age, marital status) and exposure to the earthquake.

Results and discussion
Of the 401 distributed questionnaires, 399 were returned (99.5%). Of these, the study excluded 102 responses provided by nonlocal visitors and/or including substantial missing data, yielding a final usable sample size of 297.

The regression results supported the overall model significance ($F = 12.69$, $p < .001$, $adj. R2 = .22$). Specifically, consistent with the study's prediction, self-esteem ($\beta = .21$, $p < .01$) and team identification ($\beta = .26$, $p < .001$) were found to be the significant predictors of resident mental health. On the contrary, the analysis did not identify the significant positive effect of social engagement ($\beta = .09$, $p = .18$).

Overall, the results show that residents' level of identification with a local sport team and self-esteem enhanced at its event are the significant predictors of their positive mental health status after the earthquake. That is, residents are more likely to recover from the physiological damage caused by the earthquake if they are highly identified with the local team and attain self-esteem by attending its game. The current finding contributes to the sport management literature by offering the first empirical evidence for the capacity of spectator sport to promote recovery during the post-disaster period. This finding is especially assigned with the social impact of sport, an emergent research agenda in the sport management discipline (Chalip, 2006; Kim & Walker, 2012). Moreover, the finding informs sport managers and policy makers about the potential of spectator sport organizations/events to effectively facilitate the rebuilding of society after disasters.

Selected references
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