Spectator Sport Involvement and Health: Analysis of a National Survey in Japan

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Participation in non-exercise forms of leisure has been increasingly recognized as a determinant of health (Bygren et al., 2009; Iwasaki et al., 2005; Mannell, 2007; Trenberth et al., 1999). For example, an analysis of long-term follow-up data from Swedish adults found that frequent attendance at cultural events, such as live music and theaters, was associated with a lower risk of mortality (Bygren et al., 2009). It can be thus assumed that one’s involvement in spectator sport, as a non-exercise form of leisure, is also linked to enhanced health status. Indeed, a growing body of literature has demonstrated the effect of sport spectatorship on health-related outcomes such as the level of sport participation and stress-coping (Mutter & Pawlowski, 2014; Pawlowski et al., 2013; Pringle, 2004). Nevertheless, spectator sport has often been regarded as irrelevant to health enhancement (Henderson, 2009), and no research has explicitly assessed the extent to which spectator sport involvement is related to one’s general health. The purpose of this study is to examine the relationship between individuals' involvement in sport as spectators and their perceived health status, a subjective assessment of general health (Wu et al., 2013). By analyzing data obtained from a national representative sample of Japanese adults, this study seeks to determine if spectator sport involvement significantly explains the perception of general health.

Conceptual Framework

Leisure can function as health resources that help people maintain and enhance their general health (Caldwell, 2005; Hollnagel et al., 2000; Mannell, 2007). Specifically, leisure involvement provides individuals with three distinct but interrelated types of health resources: stress-coping resources, positive psychological resources, and social support resources. First, previous research has demonstrated that leisure involvement serves as an effective strategy for stress coping (Iwasaki et al., 2005; Trenberth et al., 1999). Second, existing evidence suggests that individuals can obtain various psychological resources, such as self-esteem and a sense of mastery, by engaging in leisure activities (Caldwell, 2005; Mannell, 2007). Third, researchers have shown that leisure is a context in which the availability of social support, or “the positive aspects of social relationships” (Uchino et al., 1996, p. 488), is enhanced through the development of friendship and companionship (Caldwell, 2005; Mannell, 2007).

Little is known whether one’s involvement in sport as a spectator would contribute to creating these three types of health resources. Available evidence, however, supports a significant relationship between spectator sport involvement and each health resource type. For example, Pringle (2004) conducted interviews with fans of an English football club, identifying that attending the club’s games served as a temporarily escape from the daily life and helped the fans reduce the negative effect of life stress. Branscombe and Wann (1991) supported the role of spectator sport involvement in creating positive psychological resources by finding that sport spectatorship, as a form of team identification, was positively associated with self-esteem. In relation to social support, the results of a survey with supporters of English football clubs indicated that respondents described the clubs’ home stadium as a representation of home that allows them to have positive social interactions with other supporters (Charleston, 2009).

Moreover, although the aforementioned discussion has focused primarily on the potential health benefits of direct spectating through event attendance, TV spectating (i.e., watching sport events on TV) represents another means of sport spectatorship. Given that involvement in relaxing leisure, such as watching TV, is associated with stress reduction (Iwasaki et al., 2005), TV spectating is expected to have a significant association with one’s assessment of general health status especially through the stress-coping path.

In summary, building on the literature on leisure and health as well as previous research on spectator sport...
involvement and specific health resources, we hypothesized that involvement in sport spectatorship as a whole (H1), and specifically through direct spectating (H2) and TV spectating (H3), would have a positive association with perceived health status.

**Method**
Secondary data were obtained from the 2012 National Sport-Life Survey conducted in Japan (Sasakawa Sports Foundation, 2012). In this survey, a national representative sample of Japanese adult population aged 20 years or older was selected by a two-stage quota sampling method with a set sample size of 2,000 individuals. The final sample of this study consisted of 1,936 respondents (i.e., 96.8% of the original respondents) who provided usable responses for all study variables. The respondents were equally divided by gender with the average age being 49.56 years (SD = 16.71). Perceived health status was assessed by a 4-point Likert scale item (“how would you rate your current state of health?”; Hurtado et al., 2011). Sport spectator involvement was assessed by the total number of sport event attendance (i.e., direct spectating) and the total number of different types of spectator sports respondents watched on TV (i.e., TV spectating) in the previous year (Funk et al., 2009; Rose-Kransor et al., 2006). To account for the possible effects of demographics and other personal characteristics on perceived health status, we included seven demographics (e.g., age, gender) and eight personal characteristics (e.g., smoking behaviors, sleeping hours) as control variables in the analysis.

**Analysis and Results**
Two regression models were performed using the secondary data. In Model 1, perceived health status was regressed on all control variables. In Model 2, the two indicators of spectator sport involvement (i.e., direct spectating, TV spectating) were entered as the independent variables along with the control variables. H1 was tested by examining the statistical significance of the R-squared difference between the two models. In addition, we assessed the statistical significance of the coefficients for direct spectating and TV spectating to test H2 and H3.

In Model 1, the control variables significantly explained perceived health status, $R^2 = .19$, $p < .001$. The results of Model 2 further indicated that the inclusion of the two indicators of spectator sport involvement resulted in a significant increase in the amount of variance explained in perceived health status, $\Delta R^2 = .011$, $p < .001$. Specifically, controlling for the effects of the demographics and personal characteristics, both direct spectating ($\beta = .08$, $t = 3.85$, $p < .001$) and TV spectating ($\beta = .06$, $t = 2.78$, $p = .005$) had significant positive effects on perceived health status. These results provided support for all three hypotheses. Notably, although the standardized coefficients of the two indicators appear to be small, these values are larger than the coefficients of some established health determinants, such as smoking ($\beta = -.05$, $t = -2.04$, $p = .04$) and adequate sleeping hours ($\beta = -.02$, $t = -.97$, $p = .33$).

**Discussion**
Drawing on the literature on leisure and health, the current research contributes to the sport management literature by developing the theoretical reasoning on the relationship between spectator sport involvement and perceived health status. Our study further offers initial empirical evidence about the influence of spectator sport involvement on people's assessment of their general health. Despite potential association between spectator sport and health implied by previous research (Pringle, 2004; Charleston, 2009), spectator sport has been considered to be unrelated to health enhancement (Henderson, 2009). Findings from our study provide scholars with a new way of understanding the benefits of sport spectatorship in health promotion.