Applying the 3M Model of Personality and Motivation to Sport Event Emotional Responses

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It is not a surprising fact that among the entertainment genres in televised programming sporting events often are the favorite programs consumed by viewers. For these viewers, hedonic influences make up one of the main motivators for this sportainment consumption (Hirschman & Holbrook, 1982; Raney, 2006). In line with the hedonic paradigm, sport scholars have attempted to explore the relationship between various factors (e.g., biological, psychological, cognitive, sociological) and the emotional responses of consumers (e.g., fans, viewers). For example, it has been found that dispositional tendency (Zillmann, Bryant, & Sapolsky, 1989), suspense (Gan et al., 1997), violence (Raney & Kinnally, 2009), gender (Sargent, Zillmann, & Weaver, 1998), game outcome (Bryant & Raney, 2000), and team identification (Wann, Royalty, & Rochelle, 2002) contribute to fans’ enjoyment of sporting contests. Such theoretically based factors provide substantial explanations as to why people enjoy consuming televised sports. However, one area needing scholarly examination involves how individual personality differences— which account for plentiful variance in emotional feeling (Mowen, 2000) – interact with fans’ affective states.

Theoretical Perspective

The Meta-theoretic Model of Motivation (3M) provides a combined explanation of how personality traits interrelate with situations and thus impact emotions, thoughts, and behavioral tendencies of individuals (Mowen, 2000). This hierarchical model has a unique feature which contains both the broad and the specific level traits that influence each other. The 3M conceptual framework provides the desirable and appropriate variables at each hierarchical level (i.e., elemental traits, compound traits, situational traits, and surface traits) to predict a specified criterion variable. This model has been widely applied to various industries and areas ranging from advertisement and volunteerism to traveling, gambling, and consumer behavior (e.g., Mowen, 2004; Mowen & Sujan, 2005; Mowen, Harris, & Bone, 2004).

The present study focuses on element and compound traits to predict emotional responses to a mediated sporting event. Elemental traits (e.g., agreeableness, openness to experience, need for arousal, need for health, need for body resource, introversion) are termed as the fundamental tendencies that result from genetics and a person’s early learning (Mowen, 2000). Compound traits (e.g., competitiveness, impulsiveness, need for play) are classified as cross-situational predispositions to behave that develop from the interaction of elemental traits, culture, and the individual’s prior learning. The research question assessed in the current research dealt with how personal traits (i.e., elemental and compound traits) influence fans’ emotional reactions to a sporting contest.

Method

A survey involving elemental and compound traits scales (Mowen, 2000) and a team identification scale (Robinson & Trail, 2005) was distributed to 187 participants recruited from various sport management classes at a large Midwestern university in the United States. The subjects were then randomly exposed to one of four different manipulated versions of a video clip (an NBA contest) in a 2 (game outcome: win [lose] or lose [win] game) 2 (uncertain outcome: close or lopsided game) between-subjects design. After watching the video clip, emotional responses to stimuli were measured with bipolar pairs of adjectives (e.g., enjoyable, entertaining, pleased). Participants (n = 36) not affiliated with either team, univariate and multivariate outliers (n = 3), or with missing data (n = 11) were excluded in the final data set. Also, no problematic multicollinearity was found. Thus, a total of 137 participants – greater than the 109 suggested by a priori power analysis (Faul, Erdfelder, Buchner, & Lang, 2009) with a power of .80, an alpha of .05, and an effect size of .15 (a medium effect) – were included in the final data analysis.
Results
A hierarchical multiple regression was conducted to investigate how personality traits influence emotional responses to a sports contest. The block of the dummy variables game outcome ($\beta = -.35, p < .001$) and uncertain outcome ($\beta = -.32, p < .001$), and team identification ($\beta = .16, p < .05$) entered at Step 1 was significant, $\Delta R^2 = .24, \Delta F (3, 133) = 14.35, p < .001$. With the addition of element traits, the variance accounted in the emotional responses was significantly improved by $9\%, \Delta F (5, 128) = 3.61, p < .01$. Among the element traits, agreeableness ($\beta = .20, p < .05$) and openness to experience ($\beta = .16, p < .05$) were significant predictors of emotional responses. In the next step, compound traits did not significantly contribute to an increase in variance explained, $\Delta R^2 = .04, \Delta F (3, 125) = 2.55, p = .059$. Additionally, when the criterion variable was regressed on the full hierarchical model, agreeableness ($\beta = .20, p < .05$), openness to experience ($\beta = .16, p < .05$), and impulsiveness ($\beta = .18, p < .05$) were significant indicators.

Discussion
This study is the first known attempt to investigate how individual differences in personality are associated with fans’ enjoyment of a sporting contest. In line with previous literature, team performance (e.g., game and uncertainty outcomes) and team identification explained $24\%$ of the variance in the emotional responses. Besides the effect (i.e., team performance and team identification), personal traits significantly contribute to $13\%$ of the variance explained. It is interesting to note that individual differences in personality explain considerable variance (e.g., Fang & Mowen, 2008; Mowen, 2000; Scott & Mowen, 2007). To be specific, the element traits of agreeableness and openness to experience as well as the compound trait of impulsiveness were positively associated with emotional responses. These results indicate that individuals with these traits are more likely to enjoy mediated sporting events, a finding similar to previous studies which applied the 3M model to emotional and experiential industries such as gambling (Fang & Mowen) and traveling (Scott & Mowen). Further, although openness to experience was negatively associated with sport participation (Mowen), the current findings reveal that individuals who are open to experience tend to enjoy watching mediated sporting competition.

Applying the 3M model to spectator sport contexts would also be helpful for sport practitioners by stressing the importance of the underlying personality traits of consumers. Based on this study’s findings, effective marketing strategies should be employed to enthrall sport fans to watch sporting events. For example, practitioners can develop marketing stimuli (e.g., advertisements) focusing on relevant personal traits (e.g., agreeableness, openness to experience, impulsiveness). Mowen and Spears (1999) found that agreeable and impulsive people were associated with compulsive buying. Therefore, it would be fruitful for sport marketers as well as prospective sponsors and advertisers to understand the characteristics of sport consumers (i.e., compulsive buyers). For instance, they can employ various marketing strategies (e.g., anchoring effects, BOGO, discount codes, limited editions, lottery options) to persuade consumers to purchase products. Also, product categories (e.g., apparel, shoes, jewelry, collectibles, electronic devices) that are associated with compulsive buying (Black, 2007) could be promoted. Particularly, these sorts of strategies could be negotiated with team sponsors or network advertisers.