

## AN ASSESSMENT OF FANS' WILLINGNESS TO PAY FOR TEAMS' GREEN INITIATIVES

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Synopsis:

This study assessed fans' willingness to pay for teams' green initiatives. A CFA and SEM analysis revealed the Value-Belief-Norm framework fit the model closely and fans' VBN significantly predicted their willingness to pay a green-fee above the set ticket price for a specific ticket for a specific Philadelphia Eagles game.

Abstract:

### INTRODUCTION

The 'greening' of the sport industry can be witnessed throughout the sport industry. Recently, Seattle University launched a Sport Sustainability Leadership program, the NHL launched the NHL Green initiative, and The Ohio State University developed a zero waste initiative at Ohio Stadium. As noted by Greenhalgh et al. (2015) sport and the natural environment are intricately intertwined. The purpose of the current study is to examine the Value-Belief-Norm relationship with respect to fans' willingness to pay for sport organizations' green initiatives.

### LITERATURE REVIEW

A content analysis of 4,639 peer-reviewed articles in 21 sport-focused journals spanning from 1987-2008 yielded only 17 environmentally focused articles, with 13 of those focused specifically on sustainability (Mallen, Stevens, & Adams, 2011). Since Mallen et al.'s (2011) data collection in 2008 a number of studies have investigated the connection of sport and the natural environment. These inquiries the impact of organizations' environmental initiatives on consumers' environmental actions, the inclusion of environmental initiatives in organizations' corporate social responsibility plans, the impact of a professional sport organization's 'green game' on fans' environmental behavior, and the impact of an environmentally focused class on the beliefs and behaviors sport management students (Greenhalgh et al., 2015). Trendafilova et al. (2013)

stated that environmentally sustainable practices of are becoming expectations of sport organizations' employees, fans, governing bodies, and the general public; however, the extent to which fans are willing to pay for these initiatives is yet unknown.

#### THEORETICAL FRAMEWORK

The current study utilized Value-Belief-Norm (VBN) Theory. The VBN postulates that pro-environmental behaviors are predicted by personal norms, personal norms are predicted by beliefs, and beliefs are predicted by values (See Casper et al., 2014 for definitions of each VBN factor). Casper et al. (2014) noted, "the VBN might help to better understand the connection between sport organization-led environmental actions and fan environmental behavioral intentions" (p. 70). The current study coupled the VBN theory with Contingent Valuation Method (CVM) to get a better understating of fans' willingness to invest in their team's environmental initiatives. In the CVM, subjects are directly asked their maximum willingness to pay (WTP) for an item. This method has frequently been used to measure the value of nonmarket goods related to the environment (i.e., cleaner air, fresher water) (Cropper, 2000).

Hypothesis1: Environmental Values will significantly predict Ascriptions of Responsibility.

Hypothesis2: Ascriptions of Responsibility will significantly predict Personal Norms

Hypothesis3: Personal Norms will significantly predict WTP.

#### METHOD

Through a partnership with The Philadelphia Inquirer, a panel of 1,600 Philadelphia area sports fans was sent the survey. Respondents were presented with an opportunity to buy tickets to a forthcoming Philadelphia Eagles' game (one of the most 'green' teams in professional sport). After indicating their interest in purchasing the tickets, they were asked for their WTP to help support the Eagles' environmental initiatives. The complete instrument included five sections: environmental values, beliefs, personal norms, respondents' WTP, and demographics.

#### RESULTS

A total of 764 respondents completed the survey for a response rate of 47.75%. Of the 764 responses 662 were suitable for the CFA and 134 (as only 20% of respondents received the WTP question as this was part of a larger study) were usable for the SEM analysis. To confirm the factor structure of the VBN framework a CFA was conducted in AMOS 18. The  $\chi^2$  value (306.90) was statistically significant at  $p < .001$  ( $df = 71$ ) and the  $\chi^2/df$  ratio (4.32) was greater than one. The values of CFI (.97) and TLI (.96) reflect a good fit. However, the RMSEA score (.071) provided evidence of an adequate fit.

The SEM revealed an adequate fitting model with CFI (.933), TLI (.917), and RMSEA (.099). Hypothesis 1 was supported as Environmental Values was a significant predictor of Ascriptions of Responsibility (AR) ( $p < .001$ ) explaining 43% of the variance in AR. Hypothesis 2 was also supported as AR was found to be a significant predictor of Personal Norms (PN) ( $p < .001$ ) explaining 89% of the variance in PN. Hypothesis 3 was also supported as PN was found to be a significant predictor of Willingness to Pay (WTP) ( $p = .029$ ) but only explained 4% of the variance in WTP.

## DISCUSSION

The current study revealed significant theoretical contributions (i.e., the inclusion of CVM with VBN) which will help advance the sport and the environment literature moving beyond simple behavioral intentions. This study also illuminated several practically significant findings (e.g., teams may be able to utilize green initiatives as revenue generators in the future). These and other implications will be discussed during the presentation.

## References:

## REFERENCES

Casper, J. M., Pfahl, M. E., & McCullough, B. (2014). Intercollegiate sport and the environment: Examining fan engagement based on athletic departments sustainability efforts. *Journal of Issues in Intercollegiate Athletics*, 7, 65-91.

Cropper, M. L. (2000). Has economic research answered the needs of environmental policy?. *Journal of Environmental Economics and Management*, 39(3), 328-350.

Greenhalgh, G., LeCrom, C. W., & Dwyer, B. (2015). Going green? The behavioral impact of a sport and the environment class. *Journal of Contemporary Athletics*, 9(1), 49-59.

Mallen, C., Stevens, J., & Adams, L. (2011). A content analysis of environmental sustainability research in a sport-related journal sample. *Journal of Sport Management*, 25, 240-256.

Trendafilova, S., Babiak, K., & Heinze, K. (2013). Corporate social responsibility and environmental sustainability: Why professional sport is greening the playing field. *Sport Management Review*, 16(3), 298-313.