Impact of Involvement and Population Characteristics upon Perceived Benefits of Recreational Sports

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As society has changed over time, so has the function of sport in society. Sport remains a source of entertainment, but the psychological and physical health benefits associated with participation have become more important with the onset of diminished physical activity within the modern American lifestyle. According to Brown (2005), “Based on a national sample of 4728 college students, 52.2% report no or very low levels of physical activity” (p. 108). Physical inactivity can lead to hypokinetic diseases or death. The Centers for Disease Control and Prevention (CDC) suggests 150 minutes of moderate-intensity aerobic physical activity per week for adults to experience substantial health benefits (CDC, 2011). Limited research has investigated the impact of varying involvement in the recreational sport domain. Past research has examined the association of gender and academic class with various elements within the sport domain (Artinger, Clapham, Hunt, Meigs, Milord, Sampson, & Forrester, 2006; Belch, Gebel, & Maas, 2001; Kilpatrick, Hebert, & Bartholomew, 2005). This study seeks to consider the impact of involvement and population characteristics on perceived benefits of participation.

University recreational sport departments have the unique opportunity to provide diverse programs that act as conduits for physical activity, assisting the promotion and development of a healthy lifestyle. The purpose of this study was to demonstrate the perceived fitness, intellectual, and social benefits associated with recreational sport participation (sport clubs, intramural sports, and group fitness) and to investigate the impact of involvement and population characteristics (gender, academic class) on perceived benefits associated with participation.

College students have multifarious demands vying for their time, making it imperative for recreational sport practitioners to be aware of factors that impact perceived benefits of program participation in order to structure and market programs more effectively. Substantial research has supported several benefits associated with participation in recreational sports (Artinger, et al., 2006; Burke, Carron, Eys, Ntoumanis, & Estabrooks, 2006; Haines & Fortman, 2008; The Ohio State University, 2003). The literature emphasizes three benefit subgroups found in physical activity programs: intellectual, social, and fitness (Artinger, et al., 2006; Haines, & Fortman, 2008; NIRSA, 2004). Data received from perceived benefit scales has the potential to validate the quality and success of physical activity programs.

Astin’s (1999) theory of involvement is one theory that facilitates the study’s correlation between quantity of participation and perceived benefits of participation. A 1975 longitudinal study by Astin suggested that the environmental factors influencing student persistence implied student involvement, from that study a theory of involvement was born (Astin, 1999). This theory of involvement has grown since its conception and has been applied often across many fields related to student life. Involvement refers to time and energy spent participating in an academic or extra-curricular experience (Astin, 1999; Kuh, 1991). Astin’s theory of involvement has been studied in academic settings, but limited studies have used this theory in a sport setting. Studies that integrate Astin’s theory of involvement with benefits associated with participation in recreational sport can corroborate the necessity and significance of recreational sport.

This study was conducted at a mid-sized, private, post-secondary institution in the Southwestern United States during the 2010 Fall Semester. The target population for this study included undergraduate and graduate students who had participated in one of three recreational sport programs: group fitness, sport clubs, or intramural sports. A non-probability convenience sampling technique was utilized. The study employed both an online and hard-copy survey instrument to augment responses.

The research instrument included a total of 32 items organized within two primary sections: demographics (10 items), and a modified version of the Quality and Importance of Recreational Services perceived benefits scale, QIRS.
The QIRS perceived benefits scale examined the relationship between recreational sport activities and associated perceived benefits. The scale’s reliability was established by NIRSA (2000) and the validity was established by Forrester and Beggs (2005). For the purpose of this study, involvement focused on the quantity of time spent participating in an activity as opposed to the concept of involvement in the field of recreation (e.g. enduring involvement) (McIntyre & Pigram, 1992). The involvement categories included: < 60, 61-100, 101-180, and > 180 minutes per week.

Data collection resulted in a usable sample size of 1,919 students. Subjects were identified by dominant program involvement to associate recorded perceived benefits with specific programs; 1,619 respondents were used for specific program analysis. Based on the institution’s 2009-2010 program rosters, both intramural sport (N = 5,569) and group fitness (N = 1,261) showed a satisfactory response rate, 17.6% (n = 978) and 25.1% (n = 316) respectively, while sport clubs (N = 477) had a very strong response rate of 66.9%, (n = 319) suggesting that the respondents were representative of the programs examined. The study’s gender breakdown was 52% male, 48% female which aligns closely with the institution’s demographics. The sample showed a representative academic class distribution, with graduate students comprising the smallest group (9% of the respondents). The low graduate student representation can be explained by the institution’s enrollment distribution of 84% undergraduates and 16% graduates.

Principal Component Analysis extracted three factors from the 22 perceived benefit items. The three factors showed strong reliability with Cronbach alpha coefficients ranging from .818 -.882. A between-subjects MANOVA found a significant difference between the involvement categories for the perceived fitness benefit (F(3, 1557) = 19.036, p < .001, R2 = .035) and perceived social benefit (F(3, 1557) = 4.885, p = .002, R2 = .009) outcome variables. When examining the perceived fitness benefit subgroup, Tukey’s Post Hoc mean comparison found significant mean differences between the > 180 category and the other three categories, with the > 180 minutes per week category reporting the greatest benefit. When examining the perceived social benefit subgroup, Tukey’s Post Hoc found a significant mean difference between the > 180 category and 101-180 category, with > 180 minutes per week reporting greater benefits.

A t-test was used to examine the perceived benefit mean differences between males and females. A significant difference in fitness perceived benefits (t(1593) = -3.391, p = .001) and social perceived benefits (t(1586) = 2.548, p = .011) was found between genders. Females reported greater fitness perceived benefits (females: M = 3.221; males: M = 3.113), while males reported greater social perceived benefits (males: M = 3.122; females: M = 3.035). A one-way ANOVA tested the perceived benefit mean differences between academic classes. A significant difference was found for all three subgroup benefits (intellectual: F(4, 1558) = 9.591, p < .001; fitness: F(4, 1596) = 3.104, p = .015; and social: F(4, 1589) = 7.168, p < .001). Tukey’s Post Hoc found significant mean differences between graduate students and the other four academic classes for intellectual and social perceived benefits; graduate students reported the lowest mean scores for each. Seniors reported significantly lower fitness perceived benefits than freshmen.

This study offers critical implications for recreational sport practitioners. Greater involvement was found associated with greater fitness and social perceived benefits, which suggests the need to increase programming and program availability. Offering a graduate student league or class can potentially increase the intellectual and social perceived benefits associated with graduate student participation. Additional implications and potential future research studies will be discussed.