A recent 2015 Pew Research Center study demonstrated that 72% of all American teenagers play video games on a computer, game console, or mobile device on an almost daily basis (Cook, 2017). Despite a slight increase in youth sport participation from 2014-2015, a newly released study by the Sports & Fitness Industry Association and the Aspen Institute indicates that youth sport participation declined in 2016 and participation for children ages six to twelve is down almost eight percent over the last ten years (Bogage, 2017). While it is commonly believed that playing video games decreases social interaction and interest in sports participation, research has demonstrated the opposite. Studies have shown there is significant social interaction among video gamers and playing sports video games may increase involvement in youth and high school sports (Adachi & Willoughby, 2015; Granic, Lobel, & Engels, 2014; Lenhart, et al., 2008). Concurrent with the decline in youth sports participation, eSports or competitive video gaming has significantly increased in popularity and viewership. eSports is expected to generate $1.13 billion in revenue during 2017 with 258 million viewers in the U.S. alone (Wolstat, 2017). High schools are currently adding eSports and more than 40 NCAA colleges are now fielding varsity eSports teams with coaches, scholarships and facilities (Fischer & Smith, 2017; McConnaughay, 2017). The sense of community that gamers have is similar to team or sport identification and approximately one third of American teens have made new friends while playing video games online (Branscombe & Wann, 1991; Lenhart, 2015).

Some major professional sports leagues such as the NBA and NFL have noticed the recent increase in video gaming and eSports among US children and young adults. The NBA is aware of the revenue potential for eSports and starting in 2018, 17 NBA teams will be sponsoring eSports NBA2k teams for the next three years at a cost of $750,000 per team. More specifically, these NBA teams have hired teams of video gamers and will be paying them $250,000 per year to play the NBA2k video game competitively in a new professional gaming league (Wolstat, 2017). The NFL recently partnered with the American Heart Association to create the NFL Play60 mobile app that offers several football related games. The games require participants to walk, jump, and move their bodies in order to advance in the games and compete against other gamers online (NFL, 2017). Tackle football participation has decreased by approximately 19% during the past five years among children ages 6-17 and the NFL may believe that targeted video games can increase interest and participation in youth and high school football (Sports and Fitness Industry Association, 2017).

Adachi and Willoughby (2015) through a three year, longitudinal study discovered that playing sport video games may be an effective tool to promote participation in real sports. Building upon the Adachi and Willoughby study and grounded in the fan identification literature, the major purpose of this study was to examine how playing a Rugby mobile video game over time would influence participant interest in the sport of Rugby (Branscombe & Wann, 1991; Granic, Lobel, & Engels, 2014; Gwinner & Bennett, 2008; Lenhart, et al., 2008).

To address the study purpose, a repeated measures research design was utilized with participants playing the Rugby Nations 2016 mobile video game on the iPad Pro during three time intervals over the course of an academic semester. The sample was a convenience sample of approximately 50 undergraduate and graduate students from several university classes at a small, private university in the Great Lakes region of the U.S. Student samples are typically only deemed appropriate when they are significant consumers of a specific product or service and the majority of sport video gamers are between the ages of 18 and 34 (Brownlee, Shreffler, & Warren, 2015). A final sample of N = 25 was included in the analysis for a 50% response rate. Given the repeated measures nature of this study the sample size was deemed sufficient and the treatment took about 30 minutes for participants to complete at three monthly time intervals (Babbie, 2012). The treatment included playing the Rugby Nations 2016 video game on the iPad Pro utilizing the touch controls and completing a paper and pencil survey designed to measure interest in...
the sport of Rugby and various demographic questions. A baseline level of interest in Rugby was established prior to students participating in the study. The instrument utilized in the study was the Gwinner and Bennett (2008) sport identification scale, which is a five item Likert type scale that ranged from (1 = not accurate to 7 = very accurate). This scale has been previously validated and found to be reliable in a variety of settings.

A One-Way Repeated Measures ANOVA was conducted to compare the effect of time of playing Rugby Nations 2016 (month 1, 2, and 3) on rugby identification. There was a significant effect of time of playing Rugby Nations on rugby identification, Wilks’ Lambda = .264, F (3, 22) = 20.44, p<.001. Four paired samples t-tests were used to make post-hoc comparisons between conditions with the biggest differences being between month three (M = 4.06, SD = 1.92) and the baseline (M = 3.20, SD = 2.12) and month three (M = 4.06, SD = 1.92) and month two (M = 3.83, SD = 2.15). In other words, interest in the sport of rugby increased at a significantly higher rate the more times participants played the Rugby Nations video game. This result is in line with the Adachi and Willoughby (2015) study and suggests that participants were only marginally more interested in the sport of rugby after playing the game once, but their interest continued to increase significantly the more they played the game. This finding is also consistent with the Wann (1996) study and suggests that sport identification may increase over time due to increased knowledge of the sport after being exposed to it repetitively.

The results of this study successfully demonstrated playing mobile sports video games over time significantly influences a player’s sport identification. While few studies have been conducted in this area, the body of literature is growing and sports organizations may want to embrace sport video games as a means of increasing participation in and consumption of sports. It seems that the NFL and NBA are the leaders in this area and other leagues such as MLB and the NHL should consider similar strategies to increase participation and interest. Future research should be conducted in a more longitudinal manner and as eSports continues to grow researchers should examine how playing sport video games competitively influences sport participation and consumption. Similar to the Granic, Lobel, and Engels (2014) study, the benefits of playing sport video games need to be further explored by practitioners and researchers.