

3-15-2022

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Do, Chanwook; Uhm, Jun-Phil; Cho, Heetae; and Lee, Hyun-Woo (2022) "Bringing Students with Low Agreeableness to Attend Collegiate Sports: A Moderated Mediation Model with Team Identification and Student Involvement," *Journal of Applied Sport Management*. Vol. 14 : Iss. 1.

<https://doi.org/10.7290/jasm14t7qN>

Available at: <https://trace.tennessee.edu/jasm/vol14/iss1/4>

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Bringing Students with Low Agreeableness to Attend Collegiate Sports: Moderated Mediation Effect of Team Identification and Student Involvement

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Abstract

In a college athletics setting, we investigated a moderated mediation model of the effect of team identification on attendance intention where student involvement was the mediator and agreeableness was the moderator. Results showed that student involvement mediated the relationship between team identification and attendance intention, and agreeableness moderated the effect of student involvement on attendance intention. In particular, the interaction effect by agreeableness indicated how less agreeable students would be more willing to attend games when they are more involved in campus activities. Details of this study, including theoretical and practical implications, research limitations, and future directions, are discussed.

Keywords: *team identification, agreeableness, involvement, attendance, Generation Z*

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Introduction

As intercollegiate athletics grow costly and university budgets shrink, athletic departments are putting enormous effort into financing athletic programs. In the 2019 season, the Football Bowl Subdivision recorded 41,477 average spectators, which is the lowest for the sixth straight year since the 1996 season (Dodd, 2020). Only 25 universities in Power Five conferences recorded a positive net generated revenue (Drozdowski, 2020). In the current financial landscape of college sports, revenues must grow to compensate for these issues. The main domains of college athletic revenues, such as ticket sales and merchandise purchases, primarily pertain to student involvement (Shapiro et al., 2013). In this respect, practitioners in college sports are actively seeking ways to attract student spectators from Generation Z.

With the aim of bringing more student spectators to college sports games, researchers and managers have devoted considerable attention to the factors that help explain and predict students' attendance at live sporting events, such as team identification and engagement (e.g., Funk & James, 2001). Several studies, however, have suggested that considering additional factors may help us better understand the causal relationship between team identification and attendance intentions—that is, team identification alone may have limitations in fully predicting attendance intentions (e.g., Rocha & Fleury, 2017). Further, while considerable research has focused on student involvement, mostly related to academic success (e.g., Duque, 2014), there is limited understanding of its effect on the sports consumption behavior of Generation Z.

In order to establish marketing strategies for each generation, it is important to understand its unique characteristics (Chaney et al., 2017). Factoring in individuals' personalities can provide better insight than socioeconomic factors in predicting life outcomes (Roberts et al., 2007) and be further incorporated to explain and predict Generation Z's sports fandom or consumption motives (Brown-Devlin & Devlin, 2020). Nevertheless, the current body of knowledge has an insufficient understanding of which personality traits affect Generation Z's perception of sports fandom as well as why these traits have such an effect. To bridge this gap, we applied a model based on the relationships between team identification, student involvement, attendance intentions, and personality traits (i.e., agreeableness). Drawing on the large body of research on team identification, we established a moderated mediation model to test these relationships.

Literature Review and Hypothesis Development

The Role of Team Identification and Involvement on Spectatorship

Numerous researchers in sport management adopted social identity theory to investigate fan behavior based on self-categorization with a group and accepted roles as a fan, which formed a large body of team identification research (Tajfel, 1981; James et al., 2019). High levels of team identification have positively correlated with cognitive, affective, and behavioral aspects of fan involvement and, most importantly, attendance intentions (James et al., 2019). Although such psychological relationships have led to a better understanding of the general sport industry, researchers have paid little attention to situations where a linear association is insufficient to explain fan behaviors. For example, there may be moderators and mediators that can explain the reasons a fan with low identification might have high attendance intentions.

Collegiate sport provides an intriguing context for investigating fan behavior. Multiple levels of identification lead to students' identification with the athletics team (Heere & James, 2007). Elucidating the underlying mechanisms of college sport fan behavior is a current issue as college athletics, including football, are gradually experiencing fewer spectators (Dodd, 2020). The majority of the students who currently attend college, Generation Z, are characterized by forming digital bonds using online platforms

rather than spending leisure time with others to have a social interaction (Turner, 2015). This is also reflected by the decrease in game attendances (Dodd, 2020) as Generation Z is replacing millennials in student populations. Being that students are the main group of spectators in collegiate sports, it is imperative to understand the psychological characteristics of the student body to bring them to the stands.

Student involvement is one of the key factors that can explain a student's behavior within college sports. Astin (1984) researched student involvement in terms of the quantity and quality of the physical and psychological energy with which students spend their time during the college experience. In order to maintain students' high involvement, the university continually invests resources such as improving lecture qualities and building infrastructures (Duque, 2014). Highlighting the influence of sporting infrastructure, Sung et al. (2015) demonstrated how team identification facilitates a sense of belonging and academic performance. Based on the attachment to and behavioral involvement with a shared collective identity (Ashmore et al., 2004), students with a high level of team identification are more likely to be involved with school activities (Katz & Heere, 2016). Hence, the effects of team identification, student involvement, and attendance intention can exist in a causal chain in a collegiate setting. Thus,

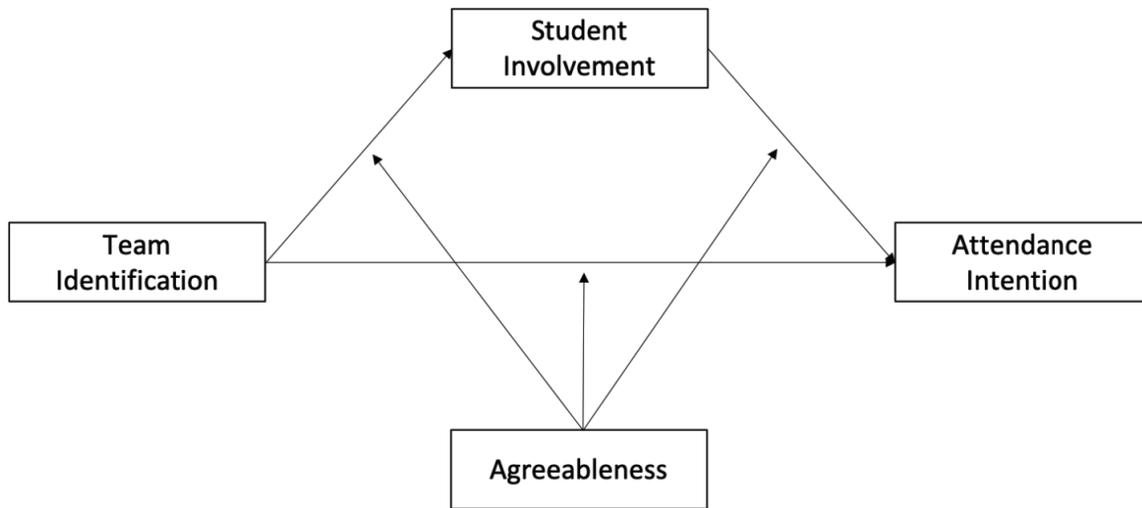
H1: Student involvement mediates the path between team identification and attendance intention.

The Unexplained Personality Traits in Fan Attendance

Although team identification may increase attendance intention through the mediating role of student involvement, not all students who have team identification homogeneously experience high degrees of student involvement and show higher attendance intention. In particular, agreeableness, which is one of the personality traits, can affect consumer behavior through empathic-emotional reactions and prosocial value motivation (Finley et al., 2017). While Donovan et al. (2005) demonstrated that agreeableness is associated with fans' identification and sport consumer behavior, Lissitsa and Kol (2021) found that agreeableness is negatively correlated with purchase intention. In the case of Lee et al.'s (2021) study, agreeableness affected spectators' emotions based on their attachment to players. Despite inconsistent findings among scholars, they converged on the idea that agreeableness is a predictor of consumer behavior (Donovan et al., 2005; Lee et al., 2021; Lissitsa & Kol, 2021). In this respect, the role of agreeableness may enhance or reduce the relationship between team identification and attendance intention via student involvement. For instance, agreeableness may not affect the variables in a causal chain of linear relationships but may affect the strength of their relations by ordinal or disordinal interaction effects. Accordingly, we consider the personality trait of agreeableness to be a moderator of all paths in the relationships among team identification, student involvement, and attendance intention. As agreeableness is the most influential personality trait affecting socioemotional attachment, it was predicted to change the relationship between team identification and student involvement (Lee et al., 2021). Further, Generation Z has dual sides of personality characteristics by having a medium level of agreeableness to be sociable but also having an individual driver wanting to avoid social settings (Magano et al., 2020). Thus, we posited the following hypothesis. Figure 1 presents the combined effects, postulated in the hypotheses, as a path model.

H2: Students' agreeableness moderates the direct and indirect paths between team identification and attendance intention via student involvement.

Figure 1
Research Model



Methods

We recruited college students at a Midwestern university in the U.S. Participants were administered an online questionnaire. Of the 303 administered questionnaires, 277 completed surveys were used for final analysis. There were 99 males (36%) and 176 females (64%) in the sample ($n=2$ did not indicate gender). Majority of respondents were undergraduates ($n=221$, 79.8%) followed by graduate students ($n=56$, 20.2%).

To test the two hypotheses, we adopted the original items and anchor points of team identification (James et al., 2019), involvement (Zaichkowsky, 1994), agreeableness (Goldberg, 1999), and attendance intention (Kim et al., 2011). The wording of the identification, involvement, and attendance intention scales were modified to measure students' participation in college football games. Using conditional process modeling in SPSS (Model 59 in PROCESS; Hayes, 2017), we employed team identification as an independent variable, attendance intention as a dependent variable, student involvement as a mediator, and agreeableness as a moderator. Mediation and moderated mediation analyses were performed.

Results

Descriptive statistics, internal consistency reliability, and factor correlation coefficients for each construct are reported in Table 1. The direct and indirect effects of all paths of the model were reported in Table 2. The results of testing hypothesis 1 indicated that the indirect effect of team identification on attendance intention via student involvement was estimated to be significant based on 5,000 bootstrap samples using 95% confidence interval. Thus, hypothesis 1 was supported.

In terms of moderated mediation analysis, the results showed that there was a significant main effect of student involvement on attendance intention, and this effect was moderated by agreeableness (see Table 2). Following Hayes's (2018) recommendation, to guarantee that the probed points fall within the range of the observed data, we established three percentile levels (i.e., 16th —low level, 50th —median, 84th —high level). Based on this setting, for individuals with low agreeableness, the conditional indirect effect of team identification on attendance intention via student involvement was significant. Hence, hypothesis 2 was partially supported.

Table 1*Descriptive Statistics and Pearson Correlations of Scores, and Cronbach's α (n=277)*

	1.	2.	3.	4.
1.Team Identification	1			
2.Student Involvement	.43*	1		
3.Attendance Intention	.49*	.40*	1	
4.Agreeableness	.12	.32*	.28*	1
<i>M</i>	5.90	6.17	6.44	4.00
<i>SD</i>	1.65	.92	1.09	.53
Skewness	-.94	-1.47	-2.49	-.61
Kurtosis	.25	2.45	6.74	.17
Cronbach's α	.89	.93	.94	.77

Note. * $p < .01$. The number of items and anchor points follows the original scales. Team Identification: eight-point semantic differential scale. Student Involvement: seven-point semantic differential scale. Attendance Intention: seven-point Likert scale. Agreeableness: five-point Likert scale.

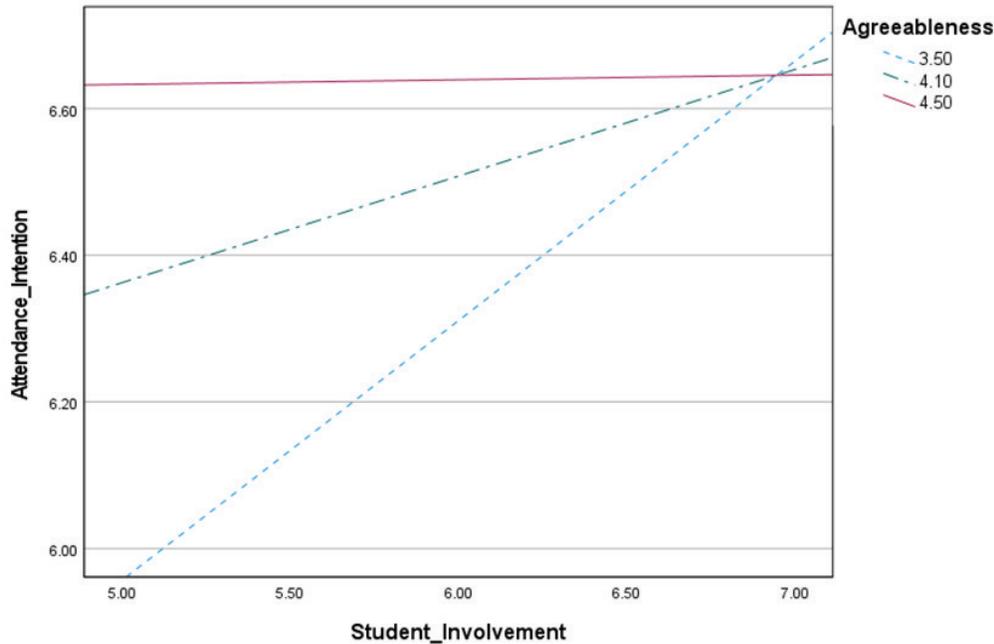
Table 2*Path Estimates and Conditional Indirect Effect*

Direct Effect	Coeff.	SE	LLCI	ULCI
DV: Student Involvement				
Team Identification	.51*	.24	.04	.97
Team Identification \times Agreeableness	-.07	.06	-.19	.05
DV: Attendance Intention				
Team Identification	.72**	.30	.13	1.31
Student Involvement		.51	.57	2.58
Team Identification \times Agreeableness	-.12	.08	-.27	.03
Student Involvement \times Agreeableness	-.35*	.13	-.60	-.10
95% CI				
Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
Through Student Involvement	.07	.02	.03	.12
95% CI				
Conditional Indirect Effect	Effect	BootSE	BootLLCI	BootULCI
Agreeableness				
Low	.09	.03	.03	.15
Median	.03	.02	-.01	.08
High	.001	.02	-.04	.05

Note. * $p < .5$, ** $p < .01$. Agreeableness Level: Low=3.5(16th percentile), Median=4.1(50th percentile), High=4.5(84th percentile).

Figure 2

The Result of Interaction Effect



Note. Solid line represents high agreeableness level at 84th percentile. Dash-dotted line represents median agreeableness level at 50th percentile. Dotted line represents low agreeableness level at 16th percentile.

Discussion

The current study identified student involvement as a mediator and agreeableness as a moderator in the relationship between team identification and attendance intention. Despite the importance of team identification and student involvement in understanding student spectator behavior, this is the first study examining both determinants to test their interaction effect. Our findings support the use of moderated mediation to better understand the effects of team identification on intention to attend college sporting events. In the following section, we discuss the current results, as well as theoretical and practical contributions.

Team identification directly affected student involvement and attendance intention. Previous studies support our finding, as student identification with university athletics influences integration into the university and enhances involvement in on-campus activities (Katz & Heere, 2016). Other scholars have extended these findings to team identification, highlighting the importance of attendance intention as an outcome in college sport (Kim et al., 2019).

Our results identified that student involvement directly influences attendance intention but also indirectly mediates the relationship between team identification and attendance intention. Other findings have similarly indicated that involvement mediates sport fan identity and purchase intention for the team’s sponsor (Ko et al., 2008). While prior literature has focused on student involvement in relation to the college experience and academic performance (e.g., Astin, 1984), we expanded the meaning of involvement to include college sport, specifically the intention to attend college athletic matches.

While both direct and indirect effects were significant in our model, there can be situations where the link between team identification and attendance intentions could be explained without the student involvement or where involvement and team identification may not be associated linearly. Similar to Lee et al.’s (2020) results, in which different psychological

connections led to disordinal interaction effects, some attendees might have a high involvement compared to team identification and vice versa. Hence, future research should illuminate situations and boundary conditions where involvement becomes a moderator.

In our study, low levels of agreeableness demonstrated a conditional indirect effect on student involvement and attendance intention. This finding shows how agreeableness moderates the indirect effect via student involvement as a function of attendance intention. Specifically, while students with high levels of agreeableness showed high attendance intention regardless of their involvement, the effect of student involvement on attendance intention was stronger for those with low levels of agreeableness. Previous research on the sport industry does not concur with our study's result (e.g., Donovan et al., 2005). However, other studies have reported that low levels of agreeableness are associated with high degrees of purchase intention among Generation Z (Lissita & Kol, 2021). Given these different findings, future research is needed to establish the role of agreeableness in influencing the behavior of sport fans.

Practical Implications

Based on our results, we provide practical insights for university administrations and athletic departments. First, the organization should develop marketing strategies to promote students' involvement in curricular and extracurricular campus activities. Clegg et al. (2010) asserted that the importance of extracurricular activities, which play a significant role in fostering positive cultural capital, is overlooked. In line with this research, connecting campus activities with the values of college athletics can bring a positive effect. For example, Bolinger and Burch (2020) found that the "Midnight Yell Practice" at Texas A&M University, which involves practicing cheers for the next day's football game, can lead to an organizational culture fostering diversity and inclusion. Universities can strategically build networks where highly identified students and students with high campus involvement can interact together.

Second, in getting more students involved in campus activities, it is imperative to capture the attention of students with low agreeableness. While high agreeableness can enhance group cohesion, people with low agreeableness tend to be better at critically analyzing and debating values and goals (Ellis et al., 2003). Hence, it could be effective to stimulate the involvement of students with low agreeableness in campus activities by communicating the values and goals of extracurricular activities (Bolinger & Burch, 2020). Having less-agreeable students spend time on researching topics and challenging the values and goals of the activities could result in a more inclusive learning environment (Ellis et al., 2003).

Third, managers need to maintain high-attendance intentions for students with high team identity and involvement. As agreeableness can influence people's behavior through empathic experience and prosocial motivation (Finley et al., 2017), it is imperative that such students experience social interactions and situations where they can feel a sense of belonging (Heere & James, 2007). In this regard, social media marketing can be a tool to promote social gatherings of students, especially for students with high involvement and team identity. For example, as younger generations spend more time on social media, students' attendance intentions could increase when athletic departments post students' views (e.g., a chant video), in addition to posts about the athletes, highlighting the community aspect of collegiate athletics.

Limitations and Suggestions

Future research should consider how athletic departments can take into account the characteristics of Generation Z, the main participants in our study, in influencing college sport attendance. Scholars have characterized Generation Z as valuing a sense of purpose as well as having a strong tendency to share goals with others, independent of introverted or extroverted tendencies (Lissita & Kol, 2021). In considering the role of personality, practitioners should define specific goals in their marketing plan that are tailored to different personalities, and that can be easily disseminated via social media (McClure & Seock, 2020).

While it is demonstrated in a number of studies that team identification has significant interaction effects with other constructs (e.g., Lee et al., 2020; Lee et al., 2017; Madrigal & Chen, 2008), it did not show a significant interaction effect with agreeableness in the current study. It may be considered that team identification is a state-like agent leading to a disposition of sport consumer behaviors, while agreeableness is a trait-like individual characteristic. Future studies should carefully dissect the unique roles and effects of these variables.

Due to the limitations of the present study, results may not be widely generalizable. First, data were gathered only on college students on one university campus in one region of the U.S. To address this limitation, future research should sample multiple universities in different regions and other divisions. Another limitation is that our findings may not apply to all generations due to cohort effects. As each generation has different experiences that shape their outlook, differences in consumer and fandom patterns may emerge between age groups (Lissitsa & Kol, 2021).

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