



Original Research

Growing the Youth Olympic Games: Comparing Millennial Generation Sport Festival Engagement

LAWRENCE W. JUDGE^{1‡}, JEFFREY C. PETERSEN^{2‡}, DAVID M. BELLAR^{3‡}, LEEANN M. LOWER^{4‡}, MAKENZIE A. SCHOEFF^{1†}, AMY S. BLAKE^{5‡}, DAGNY ZUPIN^{1*}, and NICK NORDMANN^{1†}

¹School of Kinesiology, Ball State University, Muncie, IN, USA; ²School of Education, Baylor University, Waco, TX, USA; ³Department of Kinesiology, University of North Carolina at Charlotte, Charlotte, NC, USA; ⁴College of Education and Human Ecology, The Ohio State University, Columbus, OH, USA; ⁵New Castle School Corporation, Newcastle, IN, USA

*Denotes undergraduate student author, †Denotes graduate student author, ‡Denotes professional author

ABSTRACT

International Journal of Exercise Science 14(6): 578-593, 2021. Despite the continued growth of the Olympic Games (OG), the Youth Olympic Games (YOG) has received minimal attention from mainstream media since its introduction in 2010. The purpose of this study was to examine and compare event awareness and consumption intention for the 2012 Winter YOG to two international sport events occurring in the same year. A survey instrument was utilized to examine and compare event awareness, consumption intention, and logo identification for three international sport events within a millennial generation sample. The study showed significant differences in personal and public awareness between the three sport events, with personal ($r = .313, p \leq .001$) and public ($r = .331, p \leq .001$) awareness for the YOG demonstrating a positive correlation with consumption intention. This study is an important assessment of the YOG event awareness that can be utilized by the International Olympic Committee (IOC) to better understand and engage their participants and audience. Successful promotion of the YOG may require a transformation of the current marketing strategies that are utilized. The YOG has great opportunity for success in the global sport market to leave behind the status of the best kept secret in sport.

KEY WORDS: consumption intention, event awareness, international sport, LOGO recognition

INTRODUCTION

The worldwide exposure of the Olympic Games (OG) has increased dramatically during recent decades primarily due to the advances in media coverage and technology. Younger generations, however, may be losing interest in traditional Olympic sports due to the proliferation of extreme sports and increased interest in non-traditional sporting events such as the X Games (32). In hopes of reviving interest in the OG, the International Olympic Committee (IOC) created the Youth Olympic Games (YOG) as a brand extension of the Olympics with the intent to reengage

youth around the globe with the ideals (i.e., Olympism) of the Olympic movement (9) and also to stimulate young elite athletes in terms of performance and education.

The primary vision of the YOG is to inspire and influence young people to participate in sports and adopt the Olympic values by educating and engaging athletes in the areas of Olympism, skills development, well-being and healthy lifestyle, social responsibility, and expression by combining sport, cultural emersion, and education (8). With this primary vision, the IOC continues to develop and expand the relatively new extension of the OG. The 129th IOC session during the Rio de Janeiro OG led to the development of five new strategic goals for the YOG:

1. Increase participation and competition;
2. Further the YOG within cities unable to host the OG;
3. Expand the reach and impact of the YOG;
4. Use digital platforms to expand the YOG;
5. Use the YOG as a beginning for innovative ideas (7)

In combination of the IOC's vision for the YOG and the strategic goals set at the 129th session, the IOC is seeking to expand the YOG in both reach and impact while maintaining the emersion of youth with the values of the OG.

Research has found that outside of the athletes who participated in and organizations involved in the YOG, the general interest, awareness, and attendance of the YOG has been minimal. There were only 800 accredited media sources for the Innsbruck 2012 YOG, as compared to the 10,000 + accredited media sources who flocked to Vancouver to cover the 2010 Winter Olympics (28). Despite low awareness amongst various audiences, the 2014 Nanjing YOG received attention and popularity from its host country, with 200 million viewers across China tuning into local broadcasters' CCTV. In addition, the Nanjing YOG boasted a sold-out Opening Ceremony (27). However, five different studies each indicated minimal general interest and awareness of the YOG among varying populations: sport coaches and administrators (16), amateur figure skating coaches (15), Greek athletes and coaches (12), an international sample of professionals in the field of physical education and sport (14) and Korean university students (13).

Past research shows the necessity of addressing the importance of the stakeholders of the YOG. Identified stakeholders include the host core stakeholders, the international core stakeholders, sponsors and media, parents and others (6, 18). Kristiansen et al. (18) refers to the host core stakeholders and international core stakeholders as primary stakeholders (i.e. the necessity to the YOG). In addition, MacIntosh (23) addresses the use of the athlete, not as a stakeholder but as a benefactor. In full circle, the athlete must participate in an event that will be deemed beneficial and memorable for stakeholders (23). Stakeholders will then provide financial and organizational backing for the event (6, 18).

The necessity of stakeholders and athletes cannot be overlooked in the process of researching the awareness of the YOG. However, the viewer is left out of the equation as a stakeholder and as a benefactor. Hanstad et al. (6) even goes to the length of discussing the YOG as a separate event from the OG, being able to be hosted with less media and less sponsors, contributing to

the notion that the spectator is less important for the YOG. While this may be the case, the lack of media attention objects the expansion goal of the IOC (7), strains the relationship between the YOG and its stakeholders, and contributes to the affirmation of the lack of interest and awareness of the YOG (12-16).

When examining the IOC strategic goals for the YOG, a research method and theoretical construct such as the actor network theory (ANT) may assist the IOC in determining how, when, and where to allocate resources to create a marketing platform that results in an increase in youth engagement and spectator interest (20). Anchored in the initial work of sociologists Michel Callon, Bruno Latuour, and John Law, ANT has expanded into application within many disciplines including sport-related leisure studies and mega-events (4, 13). The basic assumption of the ANT is that an entity is the result of interactions between heterogeneous actors and their networks (33). The network is a large, complex grouping of activities. The activities themselves and additional agents that effect the network are known as actors (20). The final part of actor network theory is actant - an actor with considerable influence on other actors and the greater network it is a part of (20). Within the context of the YOG, media and stakeholders are key actors upon the network of the YOG. These actors create their own networks such as the stakeholder network of host core stakeholders, the international core stakeholders, sponsors and media, and parents and others (6, 18). We then have the stakeholder network acting upon the network of the YOG, in turn being an actor upon the OG. Essentially, actor network theory creates a web of actors that give and receive influence from other sources.

In order to integrate ANT and its influence upon the YOG brand and its marketing, Keller's (17) customer-based brand equity model provides another theoretical framework suitable for studying the YOG brand. Broadly speaking, brand equity reflects marketing outcomes specifically attributable to the brand. Moreover, an understanding of individual consumer behaviors can inform strategic decisions related to target marketing, product positioning, and marketing mix activity. Keller (17) postulated that brand awareness and image influences brand knowledge and the resulting consumer response to marketing. Integrating actor network theory (20) and Keller's (17) customer-based brand equity model within the context of the YOG, the marketing network is affected by the stakeholder and media actors, while actants creating significant influence on those areas include brand awareness and consumption.

Brand awareness consists of brand recall and recognition, while brand image reflects type, favorability, strength, and uniqueness of brand associations. These qualities are essential for the creation and maintenance of sustainable brands (23). MacIntosh (23) further notes there is an emotional connection between consumers and brands, specifically consumers and sport brands. The customer-based brand equity model posits high levels of brand awareness and positive brand image increases the likelihood of brand choice and consumer loyalty while decreasing customer vulnerability to the marketing actions of competitors (17). Contemporary researchers utilize an approach to marketing that gives consideration to the consumer's awareness, interest, desire, and action (1, 22) and support the approach that brand awareness can be viewed as the

precursor to event consumption. Additionally, event consumption leads to the continued support from stakeholders (6, 18).

The researchers adopted actor network theory and Keller's customer-based brand equity model to investigate the brand awareness and consumption intention within the context of the YOG. While prior studies have examined the YOG from a marketing perspective (12, 13, 16), this research will add to the few studies that have compared the YOG to other more well established, international sport events. The purpose of this study was to examine brand awareness and consumption intention of the 2012 Winter YOG in comparison to the 2012 Winter X Games (WXG) and 2012 London Olympic Games (LOG) to illuminate strategies that expand the reach and impact of the YOG. As the YOG and the Olympic movement as a whole continue to seek to bolster and preserve its position in an increasingly competitive sport environment, this study is significant in its ability to quantify the relative market position of the YOG to other sport festivals. To conduct this investigation, one primary research question guided this study:

RQ1. What differences exist in event awareness (personal and perceived public awareness) and consumption intention (attendance, television, or social media) between the YOG, the WXG, and the LOG?

H1. Because the YOG has been categorized as the "best kept secret in sport" in the past (16), the researchers hypothesized that there would be significant differences in event awareness and consumption intention between the three events.

In addition, two supplementary questions were utilized to compare specific marketing and branding strategies of these events related to logo/icon identification as well as to expand upon the demographics of sport leadership and sport background previously studied with the YOG.

RQ2. To what degree does event logo/icon identification align with the level of personal awareness of the three sport festivals?

H2. There will be a significant positive correlation between event logo/icon identification and level of personal awareness of the three sport festivals.

RQ3. What is the relationship between these subject's individual sport backgrounds and their identification of the event brand via the official logos?

H3. Individuals having sport leadership experience will identify the (YOG, WXG, LOG) logo at a higher rate in comparison to participants without an athletic background.

METHODS

Participants

A purposeful sample of both undergraduate and graduate level students whose fields of study all related to kinesiology (e.g., physical education, exercise science, or sport management) was obtained from three different institutions and geographic regions within the United States in order to assess the YOG's marketing efforts. Participants were to be excluded from participating in the research study if they were not 18 years of age or older. University students were determined as an appropriate population for this study because the demographic is comparable to the target market for both the YOG and WXG. A total of 626 participants (21.0 ± 4.57 years of age) met these inclusion criteria and responded to the survey. The sample consisted of 58%

males and 42% females with ages ranging from 18 to 29. The participants were informed of the benefits and risks of the investigation and agreed to a university approved informed consent form. This study was approved by the Institutional Review Board at Ball State University and was carried out fully in accordance to the ethical standards of the International Journal of Exercise Science (24).

Protocol

The YOG survey instrument was modeled upon a previously developed and validated instrument measuring event awareness, consumption intention, and event logo/icon identification (13-16). The survey was modified from the original validated instrument to include scaled questions related to the intention to attend or view specific upcoming events [i.e., the then upcoming London Olympic Games (LOG), Winter X Games (WXG), and the first winter iteration of the Youth Olympic Games (YOG)]. Additionally, scaled questions measuring social networking habits and behaviors were added to the survey. In order to verify both content and face validity, a panel of experts in the area of youth sport reviewed the modified instrument. Revisions and refinement were made in response to the suggestions. No major changes were required after the comments were reviewed.

The final modified survey instrument consisted of 20 questions organized within three primary sections, including demographics (6 items), event awareness and consumption intention (10 items), and event logo/icon identification (4 items). The demographic questions included gender, coaching experience, sport administration/management experience, athletic background, parental status, and nation of residency. Event awareness and consumption intention were measured using a seven-point Likert-scale (i.e., 1 = Not at all aware ... 7 = Totally aware and informed; 1 = Not at all likely ... 7 = Very likely) for perceived personal awareness of the YOG/LOG/WXG, perceived public awareness of the YOG/LOG/WXG, intention of YOG/LOG/WXG event attendance, intention to view the YOG/LOG/WXG on television, and intention to follow the YOG/LOG/WXG on social media. The final four items consisted of a multiple-choice element requiring the recognition of the correct logo of the YOG, WXG, and the LOG from a selection of five similar graphic designs. The survey was distributed through email to graduate and undergraduate, kinesiology students at each participant university. Respondent surveys were gathered and analyzed for contribution to the data set.

Statistical Analysis

A priori power analysis based upon previous research (10) suggested a sample size of 300 was needed for the present investigation. Descriptive and analytical statistics were calculated for the overall variables using SPSS version 21.0. Data reduction was performed with Principal Component Analysis (PCA) (11). For this analysis, only factors with Eigen values greater than one were considered. The combined factors that explained the most variance were then used to compare against outcomes of interest. ANOVA analyses or Chi-square analyses were used to examine statistical differences in the mean values for event awareness (personal and perceived public awareness) and consumption intention (attendance, television, or social media) where appropriate. Statistical significance was set a priori at $\alpha < 0.05$.

RESULTS

For RQ1, ANOVA analyses revealed differences in the levels of personal awareness, $F(2, 1877) = 763.4, p < .001$ with the YOG ($M = 1.88$) producing significantly lower levels of personal awareness than both the WXG ($M = 4.31$) and the LOG ($M = 5.60$) (see Figure 1). Perceived public awareness also demonstrated significant differences in the mean values for the three events, $F(2, 1877) = 931.5, p < .001$ with the YOG ($M = 1.95$) producing lower levels of perceived public awareness than both the WXG ($M = 4.59$) and the LOG ($M = 5.70$) (see Figure 2). Similarly, the intent to consume the events via television was significantly different ($p < .001$) for all three events, YOG ($M = 2.41$), WXG ($M = 3.91$), LOG ($M = 5.69$), and the intent to consume via social media also differed significantly for all three events ($p < .001$), YOG ($M = 2.01$), WXG ($M = 3.07$), LOG ($M = 4.63$). However, the intent to attend the events showed no significant differences.

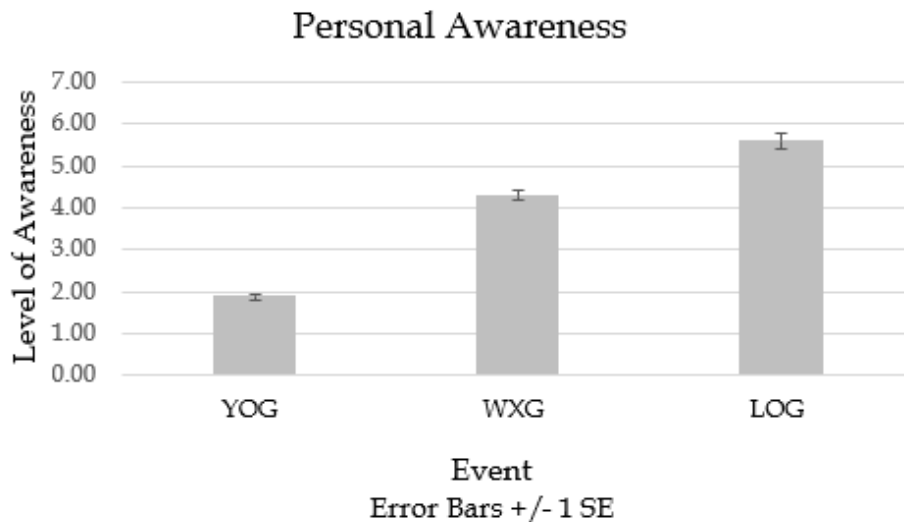


Figure 1. Perceived personal awareness demonstrated significant differences in the levels of personal awareness with the YOG ($M = 1.88$) producing lower levels of personal awareness than both the WXG ($M = 4.31$) and the LOG ($M = 5.60$).

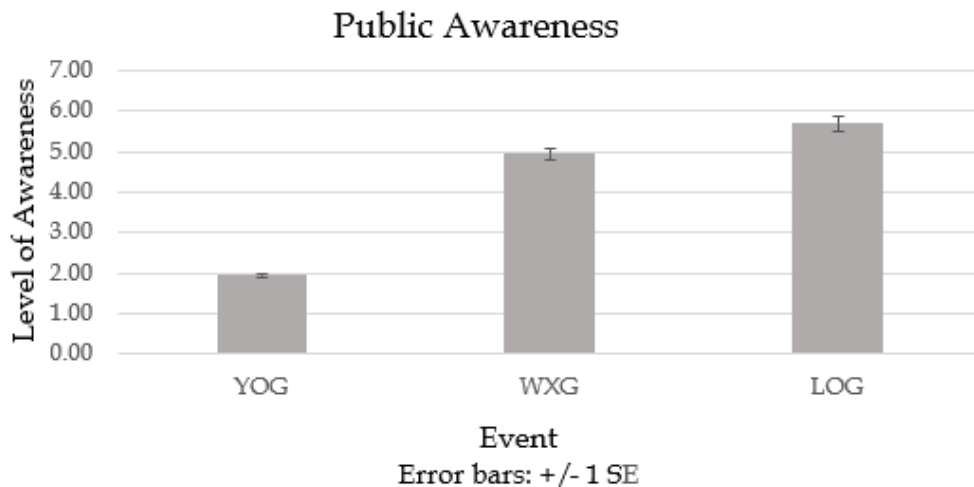


Figure 2. Perceived public awareness demonstrated significant differences in the mean values for the three events with the YOG ($M = 1.95$) producing lower levels of perceived public awareness than both the WXG ($M = 4.59$) and the LOG ($M = 5.70$).

Analyses of intention to consume the YOG, WXG, and LOG were assessed via PCA. The scores for each mode of consumption (attendance, television, social media) were combined via PCA, and one factor was extracted that explained between 69% and 58% of the total variance in the overall intention to consume. The Kaiser-Meyer-Olkin (KMO) statistics for these analyses varied between 0.522 and 0.622 suggesting adequate sampling, and the value for Bartlett's test of sphericity was significant ($p \leq .001$) for all analyses (31). A mean value was calculated for the extracted factor and then correlated with the responses for personal and public awareness for each sport event (YOG, WXG, LOG). For the YOG, there were positive correlations between awareness and intention to consume based upon the personal awareness measurements ($r = .313, p \leq .001$) and reported public awareness ($r = .331, p \leq .001$) (see Figure 3). For the WXG, personal awareness ($r = .585, p \leq .001$) and public awareness ($r = .549, p \leq .001$) indicated significant positive correlations between awareness and intention to consume (see Figure 4). Finally, for the LOG, personal awareness ($r = .595, p \leq .001$) and public awareness ($r = .533, p \leq .001$) indicated positive correlations with intention for event consumption (see Figure 5).

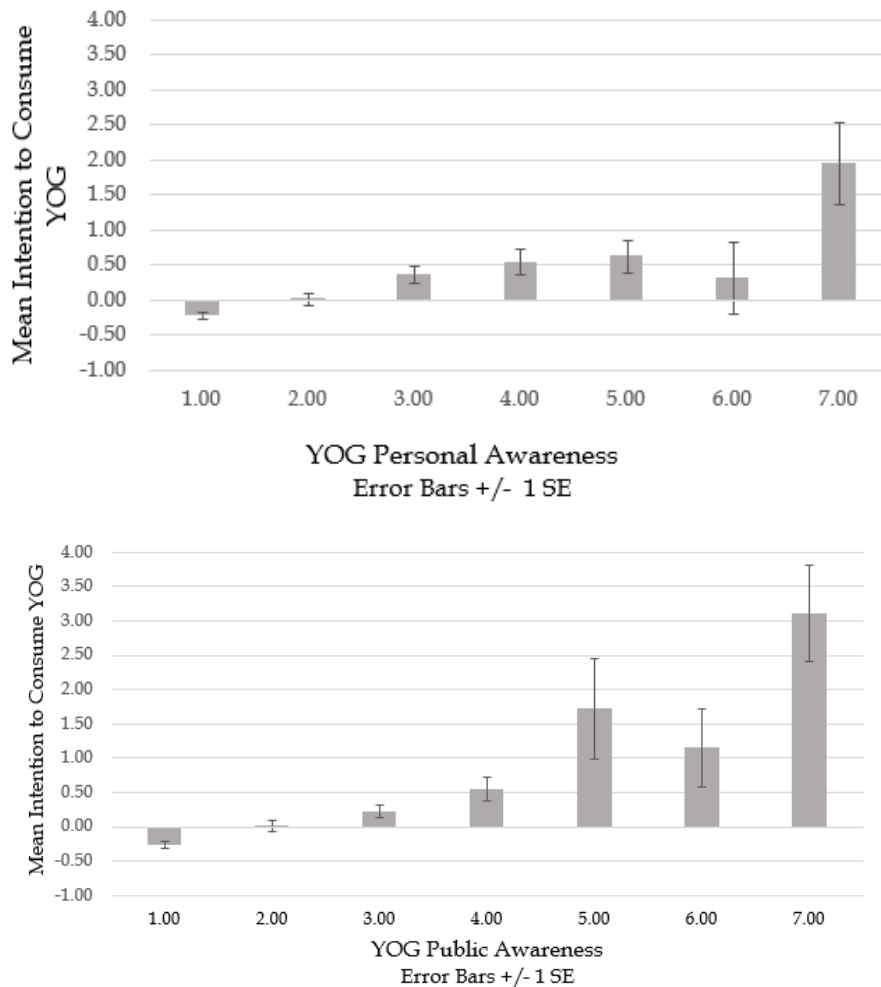


Figure 3. For the YOG, there were positive correlations between awareness and intention to consume based upon the personal awareness measurements and reported public awareness.

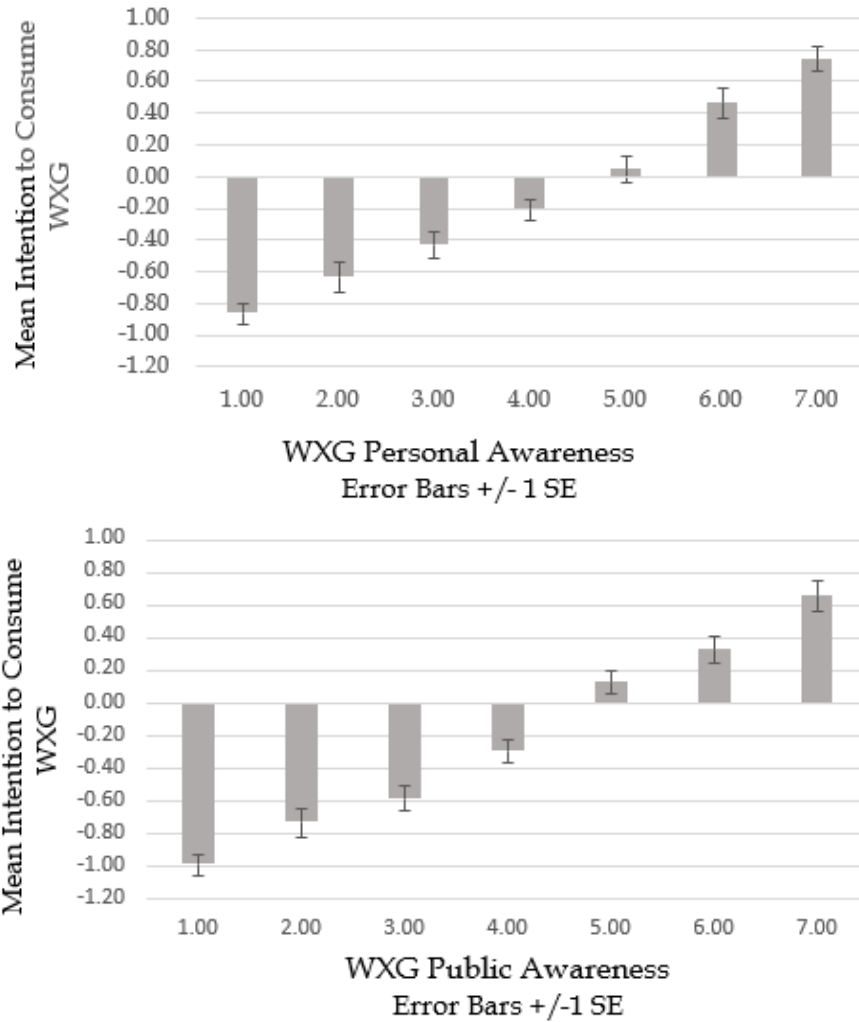


Figure 4. For the WVG personal awareness and public awareness indicated significant positive correlations between awareness and intention to consume.

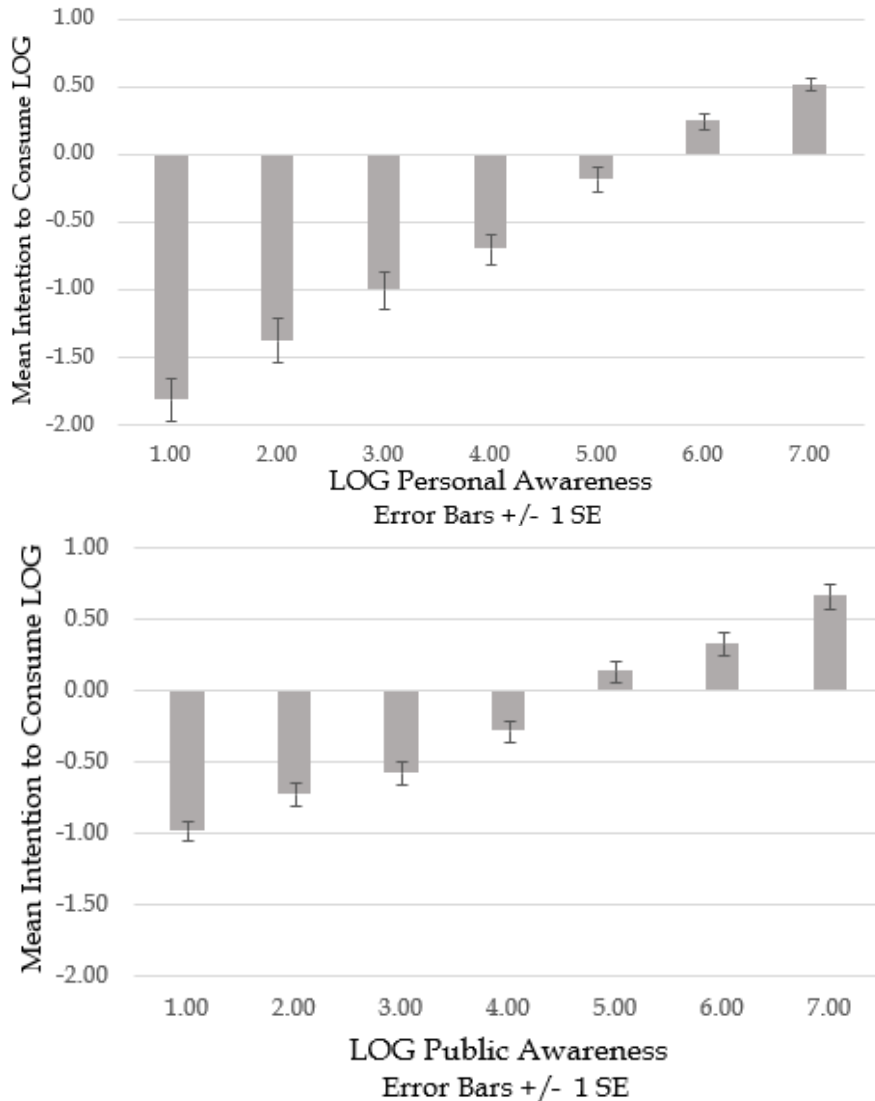


Figure 5. For the LOG personal awareness and public awareness indicated positive correlations with intention for event consumption.

RQ2 assessed event logo identification. Analyses related to research question two revealed that the correct YOG logo was identified by 35.7% of the subjects and was the most commonly selected of the five options. For the WXG, the correct logo was identified by 47.7% of the participants. However, the correct LOG logo was only selected by 20.3% of the subjects and was the second most commonly selected image from five options. With respect to RQ3, chi square analyses indicated that the sport leadership position held by the participant created a significant difference in correct logo identification ($\chi^2 = 15.78, p = .003$) for the WXG logo, with participants having sport leadership experience identifying the WXG logo at a higher rate. For the LOG logo, one significant difference in distribution was identified ($\chi^2 = 10.35, p = .035$) with the athletic background factor. Surprisingly, those without an athletic background selected the correct logo at a greater rate than those with an athletic background. The findings suggest the LOG had the greatest levels of personal and public awareness yet lagged in logo identification. This finding

may be mitigated by the timing of the survey, which occurred nearly eight months prior to the LOG and its full marketing rollout.

DISCUSSION

Given the expanding globalization of sport events and sport marketing techniques, successful promotion of the YOG may require a transformation of the marketing approaches that are currently utilized. Awareness of the YOG is affected by several factors including adequate publicity, the inaugural site bidding procedure, the initial YOG, and the lack of dialog in the sport community (10). Based upon the ANT (19, 20) and Keller's (17) customer-based brand equity model, it is imperative to increase the awareness of the YOG, influenced by the network, actors, and actants of the YOG because the total consumption of the event can only increase when more people are aware of its occurrence. While prior studies have examined the YOG from a marketing perspective (12, 13, 16), this research will add to the few studies that have compared the YOG to other more well established, international sport events. Such comparisons allow for a deeper understanding of brand recognition of the YOG, which currently lags significantly behind the WXG and LOG. Information learned through such comparisons provide insights needed to assist the IOC when determining how, when, and where to allocate resources to create a marketing platform and establish a network approach according to the concepts of Latour (20).

With respect to RQ1, results demonstrated the YOG had significantly lower levels of personal and public awareness compared to the WXG and to the LOG. With less awareness of the event, total intent to consume the YOG would begin at a lower base point than the WXG and the LOG. Taking this into consideration, it is no surprise the intent to consume the event via television and social media was significantly different between the YOG and WXG and between the YOG and LOG supporting the claim that awareness leads to consumption (22). Broadly speaking, the results demonstrated a significant positive correlation between brand awareness (personal and public) and intent to consume, which supports Keller's (17) customer-based brand equity model stating brand awareness and image influence the customer response. This correlation can be extrapolated to the support of stakeholders according to Hanstad et al. (6) and Kristiansen et al. (18). These stakeholders include primary host core stakeholders, international core stakeholders, sponsors and media, and athletes and are key in the continued functioning of the YOG (6, 18, 23).

While a significant difference existed in the awareness of the YOG, WXG, and LOG, this awareness was not assisted by a significant difference in intention to consume by attending an event. Rather, it was assisted by a significant intent to consume via media sources. The value of this research lies within the intent to consume from different sources. Although a significant difference existed in awareness of the events, the samples' intent to consume the event by traveling and viewing the event on site did not show a significant difference between the more aware LOG and WXG compared to the less aware YOG. Because of the significant difference in consumption via television and via social media between the three events, the results suggest the best effort to engage people in the YOG are through awareness and consumption via

television and social media. This coincides with the increase in use of technology and technological advances in the past decade. By creating a better brand awareness for the YOG, the IOC can ultimately resonate with the necessary stakeholders of the YOG (6, 17, 23) and with the consumer audience in order to influence the intent to consume the YOG based on the expansion goals of the IOC (7).

Previous research has demonstrated higher brand recall in sport (specifically in NASCAR) when connected to logo exposure, compared to traditional advertisements (21). Therefore, recognition of event logos was viewed as an additional measure of brand and event awareness for the three sport events. Regarding RQ2, the WXG logo was identified at the highest rate. The YOG was identified at a higher rate than the LOG with the correct logo being the most commonly chosen choice. Surprisingly, the LOG had the worst brand recognition of the three events. When comparing the personal awareness of each event by the sample group, the LOG had the most awareness followed by the WXG, with the YOG having the least personal awareness among the sample size. These results suggest awareness of an event does not stem directly from the recognition of a brand, contradicting Keller (17). However, this study did not consider the similarity of past logos. When comparing the sport events, the WXG markets the same logo each season, the YOG markets a logo mimicking a template, and the LOG markets a logo based on the individuality of the host nation. While the OG as a whole may be recognizable, each host nation creates a unique logo specific to that nation. This could explain the lack of brand recognition for the LOG while simultaneously being the event with the most awareness among the sample.

Per RQ3, the results of the survey showed the correct identification of sport event logos varies based upon the undergraduate and graduate kinesiology students' sport background. While those that held a sport leadership position identified the correct WXG logo at a greater rate than those without sport leadership experience, individuals without an athletic background were found to correctly identify the LOG logo at a greater rate than those with an athletic background. The seemingly contradictory findings regarding the relationship of the students' sport background and correct logo identification, as well as the significant difference in awareness and intent to consume the YOG, WXG and LOG via television and social media suggests the academic background of the undergraduate and graduate students surveyed for this study is not a contributing factor in their awareness and consumption of Global Games events as a whole. Their perception of each individual Global Games event may be affected by academic background, but this study is unable to address that concept. According to the data for the specific sample, the YOG may still be the best kept secret in sport (16).

In order to reach its expansion goals from the 129th session in Rio de Janeiro, the IOC may adopt strategies that employ a network approach to reaching critical stakeholders. This study, combined with previous literature (12-16), shows that brand awareness of the YOG has lacked since its inception. Utilizing the connections drawn from MacIntosh (23), Bennet et al. (1) and Lin and Huang (22), this study shows the lack of consumption of the YOG stems from the lack of its brand awareness with the YOG audience. In cycle, the lack of consumption affects the support of stakeholders necessary to the functioning of the YOG (6, 18, 23). The following

sections contain suggestions for strengthening the YOG brand based on the relation of the data collection to the research questions and to the goals of the YOG and IOC.

Extending the Olympic brand: Brand extension is a marketing strategy in which a firm markets a product with a well-developed image using the same brand name in a different product category. The YOG falls under this category of brand extension in relation to the OG. A prior study related to brand extension indicates that this strategy is more likely to succeed when the mother brand perceives that there is a positive fit and is able to transfer these characteristics to the extended brand (2). Perhaps the IOC demonstrated partial success in that characteristics of the YOG include a modeling of the traditional OG with regards to international representation, character, healthy living, and development of values. However, the results of this study suggest that although the YOG shares similar characteristics to the OG, the successful transfer of similarities was not reflected in the personal awareness of the participants. For example, this study revealed significant differences in the levels of personal awareness with the YOG ($M = 1.88$) producing significantly lower levels of personal awareness than both the WXG ($M = 4.31$) and the LOG ($M = 5.60$). Although the LOG and the YOG both fall under the umbrella of the Olympic brand, the LOG demonstrated the greatest levels of both personal and perceived public awareness in this study, while the YOG rated the lowest.

From a branding and logo perspective, perhaps the development of a greater connection to the iconic five rings within the YOG brand could capitalize on the already well-developed brand of the Olympic Games. While Davis (3) has noted the marketing benefits for corporate brands within the Olympic movement, studying brand recognition and strength in the sport event market place will become a more valuable tool to support continued growth of the YOG. Sport marketers need to consider the target audience when deciding which direction to go with brand extension. Applying this recommendation to the YOG, the IOC may need to intentionally target Generation Y in order to successfully extend and transfer the well-established recognition and awareness of the OG to its newest extension - the YOG (32).

Increasing exposure and media coverage: Insufficient media coverage is a major concern of the YOG. As a result of increased consumption by the millennial generation through technological sources rather than attendance, one of the new strategic goals for the YOG is to use digital platforms to expand the YOG (7). Both the YOG and IOC have separately targeted the media with a sense of legitimacy and urgency in an effort to address the seeming lack of interest by the sport media in attending, covering, or serving as a stakeholder of the YOG. An example of the apparent lack of interest lies in the fact that no media representatives from Canada, one of the main winter Olympic sport countries, attended the 2012 Winter YOG (28). Whereas the IOC is accustomed to taking high priced bids from a broadcasting company for the rights to cover the Olympic Games, the IOC had to essentially beg the media to cover the YOG (28). A solution to this concern, again, lies with the IOC to implement a network approach that includes stakeholders (including the media) in marketing strategies that are designed to target specific audiences.

An emphasis and ongoing affiliation with the media is essential to the future success of the YOG. The YOG may learn valuable lessons from the WXG's approach to marketing. The WXG have

expanded into mainstream culture and media while maintaining a strong connection with the millennial generation. The growing popularity of the WXG has enabled some events, like the half-pipe and slope-style contests in snowboarding and skiing, to be added to the Winter Olympics (5).

The announcement of Tencent as the internet services sponsor for the Nanjing YOG (30), gives reason to believe that future YOG will receive broader coverage and exposure through targeting young audiences. As such, Tencent included key features on the Nanjing YOG website such as sports programs and results, culture and educational activities, and interactive games targeted at youth (30). However, those Tencent key features lacked the additions to the Nanjing website of prominent social media sites such as Facebook, YouTube, Twitter, and Google +. By creating internet-based media exposure, youth athletes, as well as their parents and coaches, have more opportunities to “cross paths” with the YOG. Often scrutinized by parents for subjecting children to inappropriate content such as violence, social immorality, and adult language, the media has an opportunity to build parental support through promoting the ideals of Olympism through marketing, advertising, and covering the YOG.

Unique challenges facing the IOC for sustainability of the YOG: As an emerging event, the YOG presently faces unique challenges in capturing and addressing potential target audiences, and, as Parent (29) noted, the individual groups of stakeholders possess diverse needs and desires. Purposeful focus is needed to identify specific avenues to best reach the YOG’s target audience and allocate the resources needed to develop and launch innovative marketing strategies into those specific areas. The engagement of these stakeholders lies within the IOC’s goal to expand the YOG using digital platforms (25) because of the data support showing the YOG is spectated most using digital and technological resources. The challenge the IOC faces is the lack of awareness of the YOG. According to the data set, the YOG is the event statistically least aware of on personal and public levels. This presents a difficult situation for the IOC. Thorpe and Wheaton (32) suggest the WXG is gaining viewership from younger generations, particularly millennials, because of the non-traditional sport aspect. Meanwhile, the OG remains the IOC powerhouse of Global Games events. Being overshadowed by the OG and simultaneously competing for the target audience of the WXG, the IOC must find the YOG’s place within this global scale.

Lessons learned from the first two YOG’s: In order to most effectively extend and transfer the ideals of Olympism to the YOG, the IOC must first identify areas of needed improvement through reflection and evaluation of previous YOG events. At the 129th session during the OG hosted in Rio de Janeiro, the IOC (7) identified areas of improvement with five strategic goals outlining plans of expansion. Based on the results of this study, it can be extrapolated that the general publicity and marketing activities surrounding the YOG event were not effective in driving event attendance or television viewing, and thus, self-sustaining revenue to fund the events. The participants in the present study were far more aware of the WXG and the LOG than the YOG.

In an effort to address this disparity, marketing strategies have been implemented in order to more effectively promote the YOG. The LOG website-initiated promotion of the second summer

YOG held in Nanjing. In an effort to maximize marketing opportunities, there was a direct link from the LOG's website to Nanjing YOG's website for fans to explore and learn about the 2014 YOG (26). This link is an example of utilizing the umbrella of the Olympic Games to provide important leveraging and to directly connect the marketing of both the YOG and the LOG. Thus, further extending and transferring the ideals of the OG to the YOG. Given the outcome of this research, as well as the current status of the YOG and the IOC, future research should seek to integrate and apply this knowledge to create a better marketing strategy, possibly focusing on digital means and social media in order to engage the millennial generation. For example, sports marketers can utilize social media during the more popular X Games and OG to promote the YOG. Sport marketers may also expand their study on social media by taking a methodological application accounting for stakeholder networks in the future. An alternative route that researchers may take is a type of cross-sectional study. Researchers may consider conducting a study that compares behavioral variations of millennial generation who may associate themselves more closely as a fan of professional sports than as a fan of collegiate sports. Analyzing the efficacy of the marketing and awareness campaigns is an important step in improving future results and ensuring the long-term success of a relatively new event, like the YOG.

Limitations: Limitations of the current study must be noted when interpreting the associations observed. The data were collected via self-reported surveys, which are dependent upon the honesty and accuracy of the answers provided, as such a 20-question survey may lack thorough examination of the three research questions. The study was limited to the answers of college students with a background in sport or kinesiology. Although this targeted sample does expand the research, a larger, more diverse sample may be beneficial. Additionally, the study design compared three events with very different size, cultural backgrounds, and history which could explain some of the differences noted in the results. Whether the WXG and the LOG were the correct events for comparison of the YOG remains in question. There are characteristics of each event that lack the ability to compare the events. For example, the YOG were installed in 2007 versus the OG which were installed in 1894. In addition, the WXG's logo remains the same year to year while the OG logo is dependent on the host nation. These characteristics may be subtly different but have the potential to skew the results. Overall, the study is limited to a very specific sample generalized to a world-wide audience for three very specific events. Although generalizable, the study cannot solely address all demographics or sporting events. Nonetheless, the current study does expand the research regarding the YOG, its brand awareness, and the consumption intention of its audience. When combined with past research on the topic, the study extends the available knowledge on the YOG.

REFERENCES

1. Bennett G, Cunningham G, Dees W. Measuring the marketing communication activations of a professional tennis tournament. *Sport Mark Q* 15(2): 91-101, 2006.
2. Bottomley PA, Holden SS. Do we really know how consumers evaluate brand extensions? Empirical generalizations based on secondary analysis of eight studies. *J Mark Res* 38(4): 494-500, 2001.
3. Davis JA. *The Olympic effect: How sports marketing builds strong brands*. Hoboken: John Wiley and Sons; 2012.

4. Dawson, J, Jöns, H. Unravelling legacy: A triadic actor-network theory approach to understanding the outcomes of mega events. *J Spt & Tour* 22(1): 43-65, 2018.
5. Donnelly M. Studying extreme sports: Beyond the core participants. *J Sport Soc Issues* 30(2): 219-24, 2006.
6. Hanstad DV, Parent MM, Kristiansen E. The Youth Olympic Games: the best of the Olympics or a poor copy? *Eur Sport Manag Q* 13(3): 315-38, 2013.
7. International Olympic Committee. IOC approves recommendations for new YOG strategy goals. Retrieved from <http://www.olympic.org/news/ioc-approves-recommendations-for-new-yog-strategic-goals>; 2016a.
8. International Olympic Committee. The YOG learn and share beyond the field of play. Retrieved from: https://stillmed.olympic.org/Documents/Reference_documents_Factsheets/YOG-Learn_and_share.pdf; 2016b.
9. International Olympic Committee. Youth Olympic Games: Its' a high level sport and much more. Retrieved from http://www.olympic.org/content/yog_/yog-2/page/its-a-high-level-sport-and-much-more/; 2012.
10. Ivan E, Vidoni C, Judge L. "The world youth to share!" Challenges and opportunities in hosting the Youth Olympic Games. *Proc Int Symp Olymp Res* 405, 2008.
11. Jolliffe IT. Principal component analysis. New York: Springer Verlag; 1986.
12. Judge LW, Kantzidou ED, Bellar D, Peterson J, Gilreath E, Surber K. The promotion of the Youth Olympic Games: A Greek perspective. *ICHPER-SD J Res* 6(1): 6-12, 2011.
13. Judge LW, Lee D, Surber K, Bellar D, Petersen J, Ivan E, Kim HJ. The promotion and perception of the Youth Olympic Games: A Korean perspective. *ICHPER-SD J Res* 8(2): 12-8, 2013.
14. Judge LW, Petersen JC. An international perspective on awareness and consumption of the Youth Olympic Games. 26th Annual North American Society of Sport Management Conference. Retrieved from: http://www.nassm.com/files/conf_abstracts/2011-170.pdf; 2011.
15. Judge LW, Petersen JC, Bellar DM, Gilreath E, Surber K, Simon LS. The promotion and perception of the Youth Olympic Games: The case of figure skating. *Olymp Int J Olymp Stud* 21: 33-57, 2012.
16. Judge LW, Petersen JC, Lydum M. The best kept secret in sports: The 2010 Youth Olympic Games. *Int Rev Sociol Sport* 44(2-3): 173-91, 2009.
17. Keller KL. Conceptualizing, measuring, and managing customer-based brand equity. *J Mark* 57(1): 1-22, 1993.
18. Kristiansen E, Strittmatter A-M, Skirstad B. Stakeholders, challenges and issues at a co-hosted Youth Olympic event: Lessons learned from the European Youth Olympic Festival in 2015. *Int J Hist Sport* 33(10): 1152-68, 2016.
19. Kerr, R. Sport and technology: An actor-network theory perspective. Manchester: Manchester University Press; 2016.
20. Latour B. Reassembling the social: An introduction to actor-network-theory. Oxford: Oxford University Press; 2007.
21. Levin AM, Joiner C, Cameron G. The impact of sports sponsorship on consumers' brand attitudes and recall: The case of NASCAR fans. *J Curr Issues Res Advert* 23(2): 23-31, 2001.
22. Lin Y-S, Huang J-Y. Internet blogs as a tourism marketing medium: A case study. *J Bus Res* 59(10): 1201-5, 2006.
23. MacIntosh E. Young athlete major event experiences: Brand co-creators and ambassadors. *Sport Soc* 20(3): 438-53, 2017.
24. Navalta J, Stone W, Lyons S. Ethical issues relating to scientific discovery in exercise science. *Int J Exerc Sci* 12(1), 2019.
25. Olympic.org. Lillehammer 2016: YOG facts and figures. Retrieved from: <https://stillmed.olympic.org/Documents/YOG/2016/Lillehammer-2016-YOG-Facts-and-Figures.pdf>; 2016.
26. Olympic.org. London 2012. Retrieved from: <https://www.olympic.org/london-2012>; 2017b.

27. Olympic.org. Nanjing 2014 embraced by the nation. Retrieved from <https://www.olympic.org/news/nanjing-2014-embraced-by-the-nation>; 2014.
28. Parent M, Kristiansen E, Skille E, Hanstad D. The sustainability of the Youth Olympic Games: Stakeholder networks and institutional perspectives. *Int Rev Sociol Sport* 50(3): 326–48, 2013.
29. Parent MM. Evolution and issue patterns for major-sport-event organizing committees and their stakeholders. *J Sport Manag* 22(2): 135–64, 2008.
30. PRC. Nanjing 2014 announces Tencent as internet service partner. Retrieved from: http://www.nanjing2014.org/en/news_events/official_release/2012/1023/2195.html; 2012.
31. Tabachnick BG, Fidell LS. *Using multivariate statistics*. New York: Harper Collins College Publishers; 2001.
32. Thorpe H, Wheaton B. 'Generation X Games', action sports and the Olympic movement: Understanding the cultural politics of incorporation. *Sociology* 45(5): 830–47, 2011.
33. Zawawi NHM. Actor-network theory and inter-organizational management control. *Int J Bus Soc* 19(2): 219–34, 2018.

