

**Role Models and Athlete Expression at the Youth Olympic Games as Impactful Sport
Communication Practices**

Abstract

This study investigates athlete expressions and the impact that Olympian (OLY) role models have on athletes participating at the Youth Olympic Games (YOG), with a focus on the YOG education program. The YOG education program was created in 2010 and has not yet garnered extensive scholarly examination. Therefore, the aim of the current investigation is to develop an understanding of the impact that OLY role models have on YOG athletes and the communicative practices young athletes use to express themselves. This study uses a mixed methodology (i.e., survey and interviews) and draws on three theories (i.e., social learning theory, role model theory, and communicative theory of expression) to better understand the aforementioned impact of OLY role models on YOG athletes. An examination of the communicative expression practices of OLY role models, through the mixed methodological approach, produced novel findings pertaining to YOG athlete perceptions of the structure and benefit of the educational program.

Keywords: expression, Olympic education, Olympian role model, social media, sport communication

Role Models and Athlete Expression at the Youth Olympic Games as Impactful Sport Communication Practices

The Youth Olympic Games (YOG) was introduced by the International Olympic Committee (IOC) in 2010, where the event first took place in Singapore. Alternating between summer and winter sports, this event is held in different countries around the world every two years. Though there are similarities with the Olympic Games, the primary philosophy differs in the sense that the YOG is not strictly a sporting event, but rather a mix of sport, culture, and more importantly the education of elite youth athletes. The focus on the educational element of the YOG philosophy can be seen through the implementation of their educational program activities. These educational program activities are based on the five main themes of Olympism, skill development, well-being and healthy lifestyles, social responsibility, and expression. Activities in accordance with these themes have been carefully selected by the host nations in cooperation with the IOC to ensure the objectives fit the YOG education program (IOC, 2015).

During the time these young athletes take part in the YOG, it can be argued that they are at one of the most sensitive developmental stages in their life. Parry (2012) argues that adolescence is a time in life where young people are in constant development, and that educating young people in a school system is both a long and strenuous process. Therefore, to expect a young person to be equipped with what the YOG education program aims to achieve, in less than two weeks, is an ambitious goal for the young athletes in this competitive atmosphere (Parry, 2012). Patrick Stalder (IOC Head of Creative Services, Culture, and Education), who worked for the IOC and was in charge of the development of the initial YOG program in Singapore, made it clear that the culture and education program is meant to widen athletes' horizons on social responsibility (SYOGOC, 2010). Stalder also

noted that this program offers a set of opportunities that allow the individual athletes to choose what will enrich their lives.

The IOC asks each hosting city to promote the education program nationally and throughout the world in the two years leading up to the games (IOC, 2018). This has been a requirement since the first YOG was held in Singapore in 2010. However, not all athletes attend all of the preliminary activities considering some nations are more informative than others. This means that some athletes are not able to become familiar with the educational program until they reach the YOG (Parent et al., 2016; Peters & Schnitzer, 2015; Staalstroem, 2021). It is also known that a combination of non-mandatory Olympic education activities, and a rigid sports program, has created a challenge for some young athletes in the YOG (Krieger, 2013; Kristiansen, 2015; Parent et al, 2014a). Since Krieger's and Kristiansen's studies, participation by athletes in the YOG educational activities have increased, with 11 activities visited per athlete in Singapore in 2010, 10 visits per athlete in Innsbruck in 2012, 30 visits per athlete in Nanjing in 2014, and 15 visits per athlete in Lillehammer in 2016 (SYOGOC, 2010; IYOGOC, 2012; NYOGOC, 2015; LYOGOC, 2016). Additionally, the Chef de Mission Manual in Nanjing (NYOGOC, 2014) is one of the few manuals that specified time, such as listing that each activity lasts between "[a] half-hour to an hour" (p. 25).

Using the YOG as a developmental platform by taking part in the educational activities can be valuable for young athlete, as the event can serve as an important step in their continued career along the Olympic path. In 2012 this was highlighted by the IOC when they said, "young people who live the YOG experience could go on to become future Olympians" (IOC, 2012, p. 2). Furthermore, the experiences garnered by the athletes who take part in the YOG have been reported to have an influence on how the athletes communicate with the media and present themselves (Parent et al., 2014b; Peters &

Schnitzer, 2015). However, very little is known about who educates the YOG athletes regarding their social media use (Geurin., 2021), and consequently how they are able to express themselves. Specifically, which aspects do the Olympian (OLY) role models influence YOG athletes on (Parent et al., 2016). The OLY acronym represents the post-nominal letters that are granted by the World Olympians Association (WOA) to registered athletes who have participated in the Olympic Games (WOA, 2017). To better understand this the current investigation utilizes the YOG educational program context to examine how the OLY role models impact the YOG athletes, and their subsequent athlete expression and behavioural changes.

Pierre de Coubertin, founder of the modern Olympic Games, wanted the Olympic athletes to be role models for integrity and international bonds (Wassong, 2006). This ideal gave the IOC the opportunity to adjust and implement the OLY role model concept for the first time in 2010 with the first iteration of the YOG in Singapore. The participation of these OLY role models allowed valuable instruction and guidance to be given to the young athlete. There are currently only a few studies that have mentioned those OLY role models and their influence on athlete communicative expressions in the YOG setting. However, the present state of research has created a fragmented understanding of the influence of OLY role models as they pertain to educational objectives of the YOG (see Table 1). Therefore, a research opportunity exists in which OLY role models and their influence on athlete expression pertaining to YOG athletes' communication practices can be pursued and strengthened. Table 1 illustrates the two main themes of the current investigation, and the learning objectives in the YOG context.

{Insert Table 1 about here}

Role Model Influences on Sport Communication Practices

Role modelling is a phenomenon that has been shown in previous sport communication literature to have a major influence on young athletes (Biskup & Pfister, 1999; Leng & Phua, 2022; Meier, 2015; Staalstroem, 2021). However, this role modelling has not been examined extensively in the YOG context considering that the role modelling phenomena is more widely studied in popular cultural and broader media domains. The YOG Olympic Event Manual defines “athlete role models” as a role model who supports athletes for the duration of the YOG (IOC, 2015). In the context of our study, we refer to the athlete role model as an OLY role model, considering they are Olympians. The function of the OLY’s as a role model is to interact with the YOG athletes, to share their knowledge and experience during the activities of the YOG educational program, and to assist during the athletes’ training sessions and competitions (IOC, 2015).

In order to facilitate exchanges and the transmission of experiences and thoughts amongst the young athletes, the IOC and the International Sports Federations proposed this athlete role model programs for the YOG (Monnin, 2018). In the first YOG in 2010 in Singapore, 47 role models participated. Subsequently, there were 21 role models in Innsbruck (2012), 37 in Nanjing (2014), and 15 in Lillehammer (2016). In total, 120 OLY role models were involved in the YOG from 2010 to 2016.

The athlete role model program is a unique element of the YOG. Athlete role models have valuable information that they can pass on to the younger generation. They are positioned to inspire and empower athletes long after the games conclude, to not only be great Youth Olympians, but to share the skills and values learned during the YOG with their communities and peers (IOC, 2021).

The role models’ impact has been examined in the context of education, sport, sociological, psychological, medicine, and management (Ahn et al., 2020; Horsburgh &

Ippolito, 2018; Wells-Wilbon & Holland, 2001). Historically, role models have been considered as a mechanism for enhanced learning given their influence, with role modelling having roots in social learning theory that was first developed by Albert Bandura (Biskup & Pfister, 1999). Bandura (1976) considered observations and learning from examples as a key learning tool. By imitating others, individuals learn not only discrete information and/or isolated behaviours, but also complex behavioural patterns (Bandura). Bandura also noted that the task of learning would be tedious if there was reliance solely on the effects of the learner's own actions. Most learning is therefore learned from observations and relies heavily on the influence of role models. Social cognitive learning includes four processes (i.e., attentional processes, retention processes, motor reproduction processes, motivational processes), which enact a modelled behaviour that depends on the desire to commit. Bandura attributes significant importance to this motivational process. Learning using a role model is an essential component of the socialization process since individuals are able to be guided by appropriate behaviours of role models. This way the athletes do not have to test this behaviour themselves (Biskup & Pfister, 1999). According to Leng and Phua (2022), learning through interactions with role models and observing role models and their daily communications on social media has become more of the norm and daily routine for the modern youth.

All throughout history sporting performances and successes have been the substance from which heroes were made. Sport delivered the ingredients for dreams and fantasies, suspense and sensation, victories and success, superhuman feats, ascetism, and commitment (Biskup & Pfister, 1999). Even though families initially provide the framework as role models for children, Fitzclarence and Hickey (1998) suggest that role models, especially in sport, provide a strong influence on children later. American Olympic gold medalist Cheryl Miller stated, "When you reach a certain level of visibility, you are a role model whether you

like it or not” (Globus, 1998, p. 28). Through constant appearances in the media, role models also become familiar public figures (Leng & Phua, 2022). For many years scholars have tried to measure the impact of role models on various stakeholders in other sporting contexts (Biskup & Pfister, 1999).

People inherently search for good role models, with athletes often meeting the requirements with their perceived positive character traits such as perseverance and discipline (Teigen et al., 2000). A study conducted by Dunn (2016) shows that when there are elite female footballers serving as role models, a positive change occurs that causes more girls to play the game at the grass-roots level. Although Meier (2015) shows that while gendered stereotypes for sporting role models do exist, the value of female sporting role models is significant.

Peters and Schnitzer (2015, p. 135) noted that athlete role models are a “supporting factor” in the learning process for young athletes during the 2012 YOG, emphasizing the benefit of physical meetings and discussions. Parent et al. (2016), along with Nordhagen and Krieger (2019), called the athlete role models inspirational and positive. However, based on Parent et al. observations, they did not observe the same level of interaction, though different methodologies may have jeopardized the weaker conclusions. Regardless, YOG scholars have witnessed potential in the area of athlete role models, with Parent et al. suggesting a stronger theoretical framework to strengthen the role models impact. Additionally, Parent et al., (2019) study of the 2018 YOG, which used social learning theory, reported that the athlete role models, “helped the BA2018 athletes to continue what they are doing, to be champions, and to be ambassadors of the Olympic Movement” (p. 37). This previous observation adheres to the primary focus of this study, which is the benefit of the OLY role models concerning the Olympic education in the YOG. Appendix A summarises all YOG education program activities and indicates the key YOG activities which involved learning

from Olympian role models, for example in activities as “Chat with Champions” or “Boost Your Skills” etc.

A summary of the literature demonstrates that the main learning outcomes produced by the role models’ impact include learning to be like a role model, learning to take responsibility for your own life and outcomes, learning to pursue excellence in everything you do, skills to balance work/life, long term career development, and social responsibility values (Biskup & Pfister, 1999; Meier 2015; Parent et al., 2016; Teigen et al., 2000). Leng and Phua (2022) state that many athlete role models are already using social media to interact with their fans, which includes sharing their training regimes, other activities, and charity work. Role modelling literature is well documented in other domains, but scarce in the context of the YOG. Where role modelling can be considered and used as an effective learning tool and communication practice. Concerning the previous literature, and the novelty of the YOG setting, the first research question (RQ1) was developed:

RQ1: How does role modelling (as a learning and sport communications practice) affect the participants’ perception of learning and behaviour?

Athlete Expression as a Sport Communication Practice

The phenomena of athlete expression have been discussed in previous literature as a sport communication practice that has significant influence on the young athletes (Akelaitis & Malinauskas, 2018; Turková et al., 2021), but has yet to be studied in the YOG context. The YOG Olympic Manual defines “athlete expression” as part of the five key themes of the YOG, and is meaningfully presented in the YOG education program (IOC, 2015).

Athlete expression is an important theme in the concept of Olympic education, which encourages athletes to participate and contribute as unique individuals by sharing their YOG sporting, educational, and cultural experiences with their communities (IOC, 2015). While the athlete expression theme has been studied predominantly under emotive study domains

and psychological regulations of emotions and expressions (Akelaitis & Malinauskas, 2018; Wells-Wilbon & Holland, 2001), the body of research expands into different areas such as the legal side of expression (Chanda et al., 2021), oral and facial expressions (Xu & Armstrong, 2019), and self-representation on digital media (Hutchins & Mikosza, 2010; Turková et al., 2021; Xu & Armstrong, 2019). In recent years, the focus has changed from the analysis of athlete expressions on social media to their impact on audiences (Leng & Phua, 2022). Leng and Phua studied inappropriate athlete role model behaviours during the Covid-19 pandemic and found that athletes, through expression on social media, can have both a positive and a negative impact on spectators and broader social media audiences and communities. The general use of social media has developed an urge for the athletes to be able to understand how to share their experiences on and off the field. More importantly, there is a push to learn how to communicate stories in a responsible manner across all mediums (IOC, 2015). To illustrate this expression theme with a practical example from the YOG, the first Winter YOG in Innsbruck in 2012 included Media Lab activities where YOG athletes gained useful advice on how to behave in front of a camera, and how to use the different media channels in a responsible way (Schnitzer et al., 2014).

Looking at freedom of expression, as contained in the civil and political right of ‘freedom of opinion and expression,’ it is a fundamental right enshrined in core international and regional human rights treaties, as well as national laws (Chanda et al., 2021). The concept of athlete expression has taken an even broader perspective when Olympic Committee officials found themselves in a difficult position when formulating the media guidelines during the Beijing Olympics in 2008. While Olympic Committee media guidelines actively encourage athletes to express themselves in accordance with A.S.P.I.R.E values (i.e., attitude, sportsmanship, pride, individual responsibility, respect, and express), they wanted athletes to express their opinions about their sporting performance and Olympic experience.

However, they also did not want team members to comment on the host nation's political system or practice (Hutchins & Mikosza, 2010). The IOC is eager to use social media to promote the YOG, though, as the youth are known for their higher usage of these platforms.

Expression is the act of putting thoughts into verbal form, which involves the encoding or creation of a text or utterance. The individual engages in language as both a speaker/listener and a writer/reader, and this engagement involves both the acts of expression and communication (Williams, 1993). Thus, Turková et al. (2021) discussed how social media enables professional female athletes to present themselves more freely than traditional media and be positively received by the public. Akelaitis and Malinauskas's (2018) findings discovered that male athletes who compete in team sports have more developed emotional skills than those in individual sports. Namely, team sport male athletes have more developed self-awareness and self-regulation skills than individual sport male athletes. Xu and Armstrong (2019) revealed that Chinese female athletes' self-representation compared to that of the U.S. female athletes have been affected by cultural norms to a greater degree. Additionally, Leng and Phua's (2022) study encouraged athletes to share the positive behaviour and spread positive messages on social media through the self-expression practices.

For the communicative expression theme, the communicative theory of expression and the self-awareness theory developed by Duval and Wicklund (1972) was utilized. Communicative theory of expression posits that any action or interaction consciously or unconsciously expresses emotions, desires, intents, and/or personality (Bosnjak et al., 2016). Studying the athlete communicative expression theme allows researchers to better understand the patterns of athletes' behaviour and the link between self-awareness and expressive behaviour. In presentation of self-awareness theory, Duval and Wicklund argue that self-awareness is the capacity to understand oneself as the object of thought. People can think,

act, and experience, and they can also think about what they are thinking, doing, and experiencing. Appendix A summarises the YOG education program format activities from 2010, 2012, 2014, and 2016, and indicates the key YOG activities which involved athlete expression activities and practices. For example, activities as “Media Lab” (Innsbruck 2012) or “Chat with Champions” (Nanjing 2014), “Your Body and Mind” and “Your Stories” (Lillehammer 2016).

The focal aim of the current investigation is to deepen the understanding of athletes’ communicative expression patterns and self-awareness in athlete expressions by studying athlete expression in the YOG context. While a growing number of studies have focused on the practicalities, benefits, and challenges of social media use by athletes (Clavio & Kian, 2010; Guerin, 2017; Guerin, 2021; Hambrick et al., 2010; Hayes et al., 2019), there are few studies that have been conducted on the broader concept of athlete expression in the YOG context. Among them Schnitzer et al. (2014) reported that learning on the communicative expression theme from the athlete’s participation in YOG education activities “Media Lab” in Innsbruck 2012 (p. 1188). Further, Nordhagen and Krieger’s (2019) study from Lillehammer in 2016 included communicative expression themes by giving the athletes credit for their developed awareness of the importance of being role models for other youth athletes, and how they shared their experience of the YOG through their social media accounts. Sharing their YOG experiences with other youth of the world is one of the desired learning outcomes from the expression theme (see Table 1). In another study from the Lillehammer YOG, Parent et al. (2016) asked athletes about the impact of the expression theme on a survey of athletes participating at 2016 YOG, finding that 39.7% of athletes reported that after the YOG they managed to express themselves better, but with no further details. Parent et al. (2019) confirmed that social media should not only be seen as a promotional medium for the YOG, but that it also has to be accepted as a key expression and learning medium for the

athletes. Based on the discussion above, it was concluded that athlete expression can be considered and used as an effective learning tool and sport communication practice, and more should be understood in the YOG context. Thus, the second research question (RQ2) was developed:

RQ2: How does athlete expression (as a learning and sport communications practice) affect the participants' perception of learning and behaviour?

The proposed relationships between the OLY role models and YOG athletes, as well as the YOG athletes' expression as sport communication practices utilized in the YOG context, are depicted in Figure 1. The model can be interpreted as the combination of two sport communication practices: an external communication channel (the impact of OLY's role model on YOG athlete) and an internal communication channel (the ways how YOG athlete expresses themselves in communication through media).

{Insert Figure 1 about here}

Methods

A mixed methods approach was utilized in the current investigation to mitigate the individual shortcomings of solely quantitative and qualitative methods. The rationale for this mixed methodological approach was to provide a holistic perspective of the YOG education theme through both surveys and interviews to capture the impact made on the athletes at such an important stage in their life. This mixed methodology is supported by Tashakkori and Creswell (2007, p. 4) as, "research in which the investigator collects and analyses data, integrates the findings and draws inferences using both quantitative and qualitative approaches in a single study of inquiry." The combination of these two approaches has become a common research method when examining the YOG and the athlete experiences at the YOG (Schnitzer et al, 2014; Parent et al, 2014a; 2014b; Parent et al, 2016). A total of 173 online survey responses were recorded, in conjunction with 30 semi-structured interviews. A

phenomenological approach was utilized and deemed appropriate during the semi-structured interviews given the focal aim of this qualitative part of the methodology. The aim of the interviews was to examine the focal structure of the education program experiences by corroborating those participant experiences with others individuals lived experiences (Hemme, 2017; Willig, 2008). Four different YOG were evaluated in this study, which are summarised in Appendix B, in addition to information on the number of event days and participation.

Sample

The sample population included athletes aged 18 to 26 years old (as of October 2017) from both team and individual YOG sports who had represented Singapore or Norway in one of the four YOG (i.e., Singapore 2010, Innsbruck 2012, Nanjing 2014, or Lillehammer 2016). The two selected country's sample were both from host countries of a YOG. However, one country hosted summer sports (i.e., Singapore) and the other country hosted winter sports (i.e., Norway). The selection of these two countries was guided by convenience sampling techniques, in conjunction with the fact that the English language is widely spoken in both countries. The researcher's involvement with the YOG began by coaching the Singapore sailing team to qualify for the YOG held in Singapore in 2010. The researcher also participated in Lillehammer 2016 as an attaché for athlete role model volunteers. The researcher had access to the athletes' contact data through sport networks and involvement with the NOCs in both countries. While both NOCs were approached the same way, responses on contact information varied. The Norwegian NOC referred the researcher to the Federations to obtain the necessary contact details. Conversely, the Singaporean NOC provided most contacts, and those who were missing were collected through the researchers own network. The researcher developed a contact list of a total of ($N = 247$) athletes, with 147 athletes from Singapore and the remaining 100 athletes from Norway. The final sample

size consisted of ($n = 173$) athletes, with 92 Singaporeans, 80 Norwegians, and one athlete who neglected to report their nationality. Table 2 summarises the demographic characteristics of the participants by nationality, gender, and the YOG they attended.

{Insert Table 2 about here}

Survey

A personalized invitation was emailed to the 247 former YOG athletes with details of the project and a hyperlink to the online survey built in the REDCap program, a web application for safe data collection. All participants were informed that their response was anonymous and that they could withdraw at any time. Before starting the survey, a consent to participate had been received. The survey was sent out three times over a period of 16 weeks, and though 191 former athletes responded, 173 remained after data cleaning. The final sample indicated a 70% useful response rate, with 92 of the 147 Singaporean athletes responding (62.5%), and 80 of the 100 Norwegians (80%).

Interviews

The survey was followed by a semi-structured interview with 30 survey participants to explore the survey's findings. The recruitment process for this qualitative phase was based on the first quantitative phase. Each of the 173 participating athletes who completed the survey had the opportunity to take part in the interviews by voluntarily signing themselves up in the survey which linked to a new form that was untraceable back to their response. Of the 173 survey responses, 153 athletes signed up for the interview (88%), and of these, 30 athletes (20%) were selected with the aim of ensuring equal representation by nationality and the YOG editions. The interview sample of 30 consisted of 15 athletes from Singapore and 15 from Norway, with 60% of the interviewees being female and 40% being males. Additionally, 63% of the participants competed in the summer games and 37% competed in the winter games. The interviews lasted between 30 minutes and 40 minutes over Skype

video calling technology. This allowed the researcher to see who was answering the questions and examine non-verbal expressions (Berends & Zottola, 2009, p. 93). The consent was done orally and recorded before each interview started.

The rationale for choosing a sample size of 30 was to allow a more in-depth interview with each athlete, and it represented one in six of the survey respondents. The sample size of the 30 participants also reflected theoretical saturation where Glaser and Strauss (1967) note that when the researcher can find, “similar instances over and over again, the researcher becomes empirically confident that a category is saturated” (p. 61). This allowed the analysis of interview data to reach a point where “no new information or themes will be observed” from the participants in this study (Guest, Bunce, & Johnson, 2006, p. 59). The focused survey and interview questions were based on the perception of learning outcomes of being engaged with the two key topics of role modelling and athlete communicative expression.

Data Collection and Measurement

The role models were involved in the educational activities and the sports program as part of an instructor role. The survey explained that role models were those Olympian role models you were in contact with personally, or that held talks for you and your teammates during the YOG. The expression theme was explained as technology training on how to use media to express yourself and your sport during the YOG.

The survey had a total of 12 items, among them six items pertained to the role model theme and six items to the athlete expression theme, with statements that were to be answered by the respondents (see Appendix C). Six *role model* items measure the impact of athlete role models on the YOG athlete values, self-identity, self-awareness, and behaviour. Items were measured on a 5-point Likert scale (*Fully disagree to fully agree*). Six *expression* items measure the nature of the use of social-media (i.e., items 1 and 2), self-awareness of social-media communication patterns (i.e., items 3, 4 and 5), and awareness of alternative

commination media (i.e., item 6). Items were rated on a 5-point Likert scale (*Fully disagree to fully agree*). Reliability was computed through Cronbach's alpha, which displayed consistent results all above the 0.75 threshold for both themes. Typically, "an alpha of 0.75 is highly acceptable to show it can be reproduced on the same subject" (Rosner, 2000, p. 563). The data gathered from the survey helped guide the semi-structured interviews to include the two main themes in this examination with regards to what the "expression" and "role model" had meant to the participants who took part in the YOG educational program. Each interview was transcribed before the subsequent interview took place and was coded in NVivo with heading levels for each question of the interview, per Bazeley and Jackson (2013). The descriptive codes as Nodes in the NVivo software were labelled with a single word or theme such as "role model" and "expression," which counted subthemes as social media, create story, education, sharing knowledge, and excellence for example.

Various materials were used at guidelines in the creation of the series of items. These materials consisted of the details of the educational activities in each of the YOG formats, the material from the Olympic Games research department survey sent out by the IOC to the athletes (2016b), and each of the Youth Olympic Games Organizing Committees (YOGOC) reports (SYOGOC, 2010; IYOGOC, 2012; NYOGOC, 2015; LYOGOC, 2016). A researcher was involved in two of the four YOGs, allowing for access and observations into the experience of the educational activities and Chefs de Mission manuals (WYOGOCI, 2012, NYOGOC, 2014; WYOGOCL, 2016). Establishing validity in the instrument implies "accuracy, meaning that the respondents answer correctly to indicate what the question set out to measure" (Berends & Zottola, 2009, p. 85). This meant that the two key themes had six items each to measure the target objectives for each key theme. The evaluation of learning in the current investigation utilizes indirect assessments such as surveys and in-depth interviews. Although more direct measures of acquired knowledge exist (e.g., change in

testing scores), previous research has stated that participant perceptions of learning achievements may be used as surrogate measures of actual learning (i.e., Kuhn & Rundle-Thiele, 2009). While future research would benefit from the development of direct assessments, the findings are posited to be understood as more than just perceptions of educational outcomes based on previous research.

Results and Discussion

The theoretical framework draws on the social learning theory, role modelling, and the communicative theory of expression. The purpose of this study was to test our model (Figure 1) to understand the impact of OLY role model on YOG athletes, and the YOG athletes' expressions as sport communication practices in the YOG context. First, we discuss the OLY role models' impact, followed by testing the YOG athlete expression practices.

Role Models' Impact

The YOG athletes responded to six items on the influence of OLY role models, the results indicate means and standard deviations (SD) for each cohort separately, as well as the whole sample together, by each item with *p*-values between 0.01 and 0.05 (See Table 3). The most distinct impact on athletes, discovered by through the survey, came from the realisation of importance of pursuing excellence. Therefore, we added the theme of excellence to advance upon preestablished literature (i.e., Dunn, 2016; Leng & Phua, 2022; Parent et al., 2016), with a specific focus on the cognitive and physycial aspects of role model influence positive impacts.

{Insert Table 3 about here}

The qualitative comments were used to enrich quantitative findings on the OLY role model theme. In the interviews, the conversation athletes had, often referred to their interaction with OLY role models within their sport during training, competition, and educational activities. Considering the benefit that may have come from interactions outside

of the educational activities, and the potential difficulty of remembering what impactful experience was confined to solely the educational activities, the total interaction from their experience was examined. Studies examining the impact of the educational activities within a shorter timeframe of the event (i.e., YOG) may be able to parse out the impact from the educational activities compared to alternative spurious interactions (e.g., in the Olympic village, during a training session). From a more extensive NVivo analysis, based on the number of mentions of each theme, five key influences of OLY role models on YOGs athletes were identified. The five influences were conceptualized as *the role of education (a degree)*, *the role of knowledge and experience sharing*, *the concept of excellence*, *the concept of networking*, and *the development of anti-doping values*.

The first key influence revealed from what the athletes discussed in their interviews pertains to *the role of education (a degree)*, as this was viewed as important considering not everyone can live of their sport. Therefore, an understanding of the bigger picture, and the employment of strategic planning/behaviour in life could specifically explain the prevalence of this theme amongst the athletes. For example, one athlete who participated in the YOG in Nanjing in 2014 saw an additional outcome of the YOG education from which athletes would benefit:

It was also introduced to us that it is not many athletes who actually manage to live of their sport. So, we got told that education is very important, and it should be possible to combine them both. I don't remember everything, but it was emphasized by the role models or at one of the activities, that education was important. I have also taken this with me from my country, but I thought this was very nice to hear in YOG as this is an international platform for young athletes. Even for me it just made it more clearly how important (a degree) education is, and how important it is to have something after sport. (N2, 2014)

Previous research by Payne et al., (2003) and Barnett and Bernard (1993) highlighted that the impact that role models have can spread to the non-sporting context, which was the case in the current study that found education to be one of the influences that was passed down from the OLY role models. Therefore, it seems to be valuable from this athlete perspective to use OLY role models as agents to emphasize the importance of education to prepare the athletes for a life after sport.

The second identified influence was *the role of knowledge and experience sharing*. This was identified by athletes as another valuable impact area of OLY role models. This influence is a combination of daily experiences from sport, experience beyond sport in their daily life, accumulated knowledge of being an elite athlete, and the process of sharing such information. The following YOG athlete expressed this by saying that:

I did meet with a Chinese role model, an athlete himself. He told me to believe in myself and never stop or give up. Train hard and it is maybe a bit hard now but in the long run it will be worth it. So, I keep this in my mind. (S6, 2014)

Similarly, another YOG athlete observed that putting their own life into perspective and learning to accept the quick wins, in addition to developing the ability to endure long enough for the long wins, was another rare and valuable lesson from OLY role models in the Chat with the Champion activity.

I went for the Chat with the Champion where I went with our Singapore Young ambassador that was interesting; it was a very good experience to listen to the champions in terms of what they have achieved were they are now and their experiences. So, from all this talks I think I got to learn and got to know that I am not really alone, since they share those moments with us when it comes to hardships. And that we can still be successful even of all of that, as it is normal to

have hurdles in life and sport. I took with me from them that a successful life is not only based on medals and wins in the Olympics or other big events. (S8, 2014)

The perspectives here from the YOG athletes indicate that they should clearly be exposed to competent OLY role models in a formal educational program, who can significantly impact cognitive skills and the performance of the young athletes (Payne et al. 2003).

Another influence is *the concept of excellence*. The Olympic value of excellence (see note in Table 1) was certainly impressed upon the athletes as half of the survey respondents strongly agreed that taking part in the YOG had taught them to do their best. In the interviews, athletes talked about learning to not give up and do their best as a result of interactions with the role models in Chat with Champion activity. One Singaporean athlete said:

The role models had talks with us (Chat with Champion), and they were sharing with us what it takes to be an athlete and be disciplined to reach our target or goals... as I took with me the dedication and discipline. As is good for my study today. (S14, 2010)

While previous YOG research has focused more on the role models as inspirational and positive (Nordhagen & Krieger, 2019; Parent et al. 2016), the results of the current investigation show that OLY role models can impact the YOG athlete's excellence, as this is an important asset and ideology the IOC would like to maintain. Although Meier (2015) says that excellence, inspiration, and encouragement gained from role models are hard to measure and usually transcend the sporting world. We still suggest that the number of OLY role models and their engagement could be expanded and formalized to contribute to the spread of excellence.

The fourth significant influence came from the importance of understanding *the concept of networking*. The type of networking discussed was not only networking in sport, but also networking in life beyond sport. One athlete said it is: "... important with a large network and develop as in having something to move into after or together with sport. Also, the importance of seeing each other, introduce and say hi to develop a larger network in my sport," (S3, 2010). Despite the fact that YOG athletes are young, it is a critical time to be introduced to the concepts of friendships and networking to enrich the lives of the athlete when they leave the competitive sporting world. Therefore, to help instill positive networking skills and opportunities early in their career, we suggest that the use of OLY role models in Olympic education should be expanded on in YOG setting, not only from our findings, but in conjunction with other studies on sport role models as well (i.e., Payne et al., 2003).

The last influence from the athletes was the introduction to the concept of adhering to *anti-doping values*. The World Anti-Doping Agency (WADA) has been heavily involved from onset of the YOG. Although many athletes have heard about the anti-doping concept, it was particularly important to be exposed to this critical topic for the athletes. Doping is an ongoing problem in sport, which was confirmed and revealed by one YOG athlete that took part in Singapore in 2010, as they mentioned interacting with one OLY role model that was later banned because of a doping violation:

We had education on doping, but I think one of the role models back in 2010 were taken for doping some years after, the Russian athlete Isinbayeva. If she was using dope or not, I am not sure... but it was something I remembered when the Russians were boycotted from Rio. (N5, 2010)

The former YOG athletes did talk about taking part in anti-doping activities, but this particular quote exemplifies how important it is to have OLY role models who practice safe sport. The sport is not free from doping, as Payne et al., (2003) mentioned that sport role

models can influence and change behaviours regarding safety, smoking, the use of chemicals, etc.. This means that clean OLY role models are critical, and the importance to stress education on anti-doping in Olympic education must continue so that athletes make good choices instead of being influenced by the wrong OLY role models.

In light of social learning theory, and in line with the framework in Figure 1, we conclude that OLY role models as a function of learning and form of a sport communication practice positively affects the YOG participants perception of their learning and behaviour in multiple ways, as discussed above. This conclusion addresses the question raised in RQ1.

Influence of Athletes Expression

Regarding the athlete expression theme, we studied the nature of expression, the level of self-awareness of social-media communication patterns utilized by athletes, and athletes' awareness and use of alternative communication channels. Since the first YOG in 2010, the use of social media has expanded, and more social media platforms are available by date (Staalstroem, 2021). Thus, Table 4 shows standard deviations (SD) for each cohort separately and the whole sample together by each item with p -values between 0.01 and 0.05. The most distinct impact reported by athletes came from their realisation of importance of social media as a sport career brand builder (item 5). Examples of purported positive outcomes pertaining to the use of social media by the athletes related to the realisation of how much of an impact social media can have. Specifically, using social media to share their personal stories, reflecting on and understanding the positive power of their own expression, learning to inform followers of their achievements during the YOG in a responsible manner, and understanding how to conduct proper self-promotion. Conversely, examples of negative outcomes related to the speed at which news spread leading to unwanted attention, and the stress of producing content desired by their followers and supporters. Our findings support previous studies through the discussion of both positive and negative outcomes, such as the

opportunity to share successes and their own achievements on social media. Juxtaposed to negative outcomes such as distraction from competition, wasting time, and the dependence on followers support (Akelaitis & Malinauskas, 2018; Clavio & Kian, 2010; Hayes et al., 2019; Leng & Phua, 2022; Turková et al. 2021; Xu & Armstrong, 2019). Further, expression was understood as being a promotion and a communication tool to draw sponsors' attention in a professional manner. At the same time social media use provides YOG athletes with the opportunity to craft their desired image and begin developing their personal athlete brand (Arai et al., 2014).

{Insert Table 4 about here}

Again, we believe that the quantitative findings are enriched by the qualitative comments discussed by the athletes. From theme NVivo analysis (based on a number of mentions of each theme) we have identified four key elements of the impact of expression themes on YOGs athletes, namely the *knowledge of the theory and practice of social media*, *story creation and self-expression*, *communication to media sponsor or brand building*, and *social media platforms use and beyond*. We discuss in brief each of those four impact areas below.

The first element of expression is the *knowledge of the theory and practice of social media*. Many athletes talked about how important it was to garner higher awareness through social media concepts (meaning its theory and practice through the activities). For example, one Singaporean athlete (S9, 2010) emphasized that they “appreciated awareness of how quickly information on a social media platform can spread”, and remembering they were told to be careful with what they post by being engaged in “talks (activities) about this (social media) as a platform in how to behave, what to say and what to share and got aware of how one picture or story can spread fast. This finding has significant implications regarding the educational objectives of the young athletes by demonstrating the powerful extent of social

media. Geurin (2021) argues that social media training and education can help athletes develop a strategic approach to their social media use. Although we talk about the impact of social media during the games from the educational program perspective, all aspects are important before, during, and after the YOG.

The second element involved *story creation and self-expression*. The athletes talked about the YOG as a time where they were encouraged to share information about their life during the Games with their family, friends, and followers. The IOC wants this to occur considering young athletes are prolific users of social media, meaning that there are opportunities to use the YOG as a medium for future activities. Furthermore, the IOC also has a responsibility to teach the young YOG athletes how to behave on social media. Many athletes did in fact share their stories on social media during the YOG, with one former YOG athlete managing to remember the moments they thought a social media post was appropriate to share:

During the game I used social media at that time to share about my experiences at the game. I also got with me how to think of what is appropriate to share and not. The same time also the correct time and not all the time, for when to post. If you have many followers, it is more critical what you share about personal things. (S8, 2014)

Other athletes reported remembering acquiring skills and competence to produce social media content for self-expression purposes, and two expressions from athletes who took part in Lillehammer in 2016 indicated that they, "... do remember we talked about this course being held on social media on how to promote oneself and showing us what is good and bad. (N15, 2016)", while the other said,

One from my club and me we made a movie in the Olympic Broadcasting area; this was about my sport, and it was fun! We could cut and paste add music to it etc., there were many features available to make this film. (N10, 2016)

These above findings are valuable for a sporting career self-expression purpose, to show that clear learning objectives in “media activities” during the Games should continue and develop. This includes how to share the athletes’ life with their followers, how to develop connection with followers, how to gain personal sponsor opportunities, and how to perform proper self-promotion. Guerin (2017) previously emphasized that social media has the potential to enhance an athlete’s personal product, indicating that there should be support for the YOG athletes that want to partake in this endeavour. Additionally, Peters and Schnitzer (2015) saw the YOG as an ideal platform to initiate the development of personal brands for athletes. Our contribution to these previous findings revolves around athletes reporting a desire to acquire awareness and skills to *communicate with media sponsors and build own brand* in a responsible, respectful, and professional manner. This is important to understand as strong brand building can be an asset during and after high performance careers. One of the athletes expressed this by saying:

We were made aware of that we are now role models and are in the public eye, so how to behave on social media and think about what we shared were stressed. (S5, 2010)

Guerin (2017) highlighted the importance for young athletes to build a brand in the Olympic years, as those are the years when athletes receive the highest level of attention from the public and media. Therefore, we see the YOG as an ideal time for development of expression skills by the athletes, which should be addressed properly.

Finally looking at *social media platform use and beyond*, the athletes reported the obtaining the acquired skills of actual social media platforms use as a way to network, interact, and build friendship. A former Singaporean athlete (S15, 2010) expressed that the video games was an asset for icebreakers in the YOG when learning how to interact, “when one don’t speak same language.” Others talked about taking part in cultural dancing

activities, martial arts, and learning how to express themselves through small films and large collages of individual pictures. This partly suggests that the YOGOC and the IOC should continue to strengthen expression through cultural activities, so that traditions can be learned and understood from different countries.

In light of communicative theory of expression discussed and in a line with the framework of Figure 1, we conclude that athlete expression can be considered and used as an effective learning tool and impactful sport communication practice. From empirical findings we conclude that expression as a learning and sport communication practice positively impacts the participants' learning and behaviour in four distinct ways, answering RQ2.

Theoretical and Practical Implications

The current study identified several key implications which the IOC could find helpful and important to review and address in order to strengthen the role models, and the impact of athlete expression as a sport communication practice on YOG participants. First, we see that the OLY role model program has substantial potential as a learning tool. Young athletes respond positively to the role models' knowledge and advice. Therefore, it is important to have OLY role model activities with clear learning objectives within the program. This finding is similar to Parent et al., (2016) who suggested the development of a stronger theoretical framework. We suggest that a dyadic interaction (i.e., OLY role models and YOG athletes), such as coaching and mentoring, could be beneficial to a number of different athletes and the YOG itself. We believe that the role model program, should a greater number of OLY role model participate, would be even more beneficial as a learning tool.

Second, better measurements for the OLY role model's impact are needed. It will help scholars who evaluate the Olympic to unlock the potential of role model learning. While we used an indirect assessment of learning tools, like surveys and interviews, future studies are

invited to take on more direct learning assessments that may encourage the YOG education program management to develop potentially different learning assessment tools like quizzes, tests, oral presentations, and video reports. We encourage a possible use of more quantitative performance indicators like a repeated measures experiment of OLY role models on athlete (sport) performance (i.e., personal satisfaction, stress management regulation, self-identity building, self-actualization). This form of analysis could be considered among others to be brought to the YOG context.

Third, we suggest considering multidisciplinary approaches to athlete expression. Those approaches could combine legal standards of expression, psychological dimensions, marketing and sponsorships regulations aspects, and cross-cultural considerations of expression. Combining previously discussed research with the aforementioned areas will facilitate interconnectedness of themes and a stronger impact on the athlete expression theme.

Finally, we suggest a long-term perspective on learning outcomes as most of the literature and YOG studies have taken a relatively short-term approach. Staalstroem (2021) revealed that the majority of studies on the effect of the YOG took place either at or shortly after each game. We call for more research to investigate the parallel effect of the sporting and non-sporting component of the YOG.

Limitations

While our study delivered meaningful and original outcomes, as many other studies it is not free of limitations. First, the sample could have been larger and far more representative of the entire cohort of athletes. A wider selection of countries may have affected the outcome of this study when considering language differences, educational opportunities, access to social media, and different cultural and social norms connected to self-expressions, various communication taboo, regional role model behaviours, and relationships expectations.

Second, the design's limitations include the indirect assessment of athletes learning, the data collection point being two to eight years after the event, the need for more specific questions, and the need for extended response time for athletes whose primary aim has been sporting performance. However, our study included quantitative data, which gives access to a larger number of athletes with reduced bias (Gratton & Jones, 2009). A phenomenological approach is covered in the qualitative method with depth delivered through the athletes' own experience, and through a verbal narrative method for analysis (Blaikie, 2007). This gave the researcher insight into how the activities of the YOG education programs at the four different games were perceived and practised by the former YOG athletes.

Third, our study could have had a longitudinal nature (during and post YOG). It would allow for the change in the studied variables to be seen. However, as the study was designed only a few years after YOGs were founded, we encourage to implement these suggestions starting in the upcoming YOG in 2024 in Gangwon.

Fourth, we accept a possible deviation between the planned and actual participation of athletes in the YOG education program and the planned and actual exposure to the OLY role models. Those questions should be added to the future research surveys. To mitigate this limitation, we suggest continuing to increase an awareness about the YOG education program. Having mandatory participation of the YOG education activities could increase the program's impact.

Fifth and finally, we understand that there can be many more reasons and themes (beyond the scope of our study) which could contribute to the answer why athletes were affected by OLY role models and athletes' expression educational activities. We suggest to the future scholars studying the Olympic to conduct additional studies, which could involve exploring psychological, social, and cross-cultural reasons and themes.

Conclusion

Measuring learning and the impact of OLY role models on athlete expression sport communication practices is challenging when juxtaposed to quantifying sport achievements. Findings of our study indicate that OLY role modelling and athlete expression can be considered and used not only as effective sport communication practices but also as an effective learning tool. Our study sheds new light on the further effectiveness of the sporting and non-sporting components in athlete expression and role model themes in post YOG times. We contribute to the ongoing process of developing the YOG as an effective youth Olympic educational platform.

This study is novel and significant for several groups of stakeholders, such as the IOC, NOCs, International Sport Federations, and sport event organizers (e.g., media members, participating athletes, OLY role models, coaches). The study outcomes are valuable for several reasons, such as the relative newness of the YOG concept, the potential of the YOG event to influence young athletes at a critical life development stage through the multitude of media channels, the potential of role modelling and athlete expression themes to serve as impactful sport communication practices, and the lack of previous research in this field across YOG and Olympic education.

References

- Ahn, J. N., Hu, D., & Vega, M. (2020). "Do as I do, not as I say": Using social learning theory to unpack the impact of role models on students' outcomes in education. *Social and Personality Psychology Compass*, 14(2), e12517.
<https://psycnet.apa.org/doi/10.1111/spc3.12517>
- Akelaitis, A. V., & Malinauskas, R. K. (2018). The expression of emotional skills among individual and team sports male athletes. *Pedagogy, Psychology, Medical-Biological Problems of Physical Training and Sports*, 22(2), 62-67.
<https://doi.org/10.15561/18189172.2018.0201>
- Bandura, A. (1976). Social learning analysis of aggression. In E. Ribes-Inesta & A. Bandura (Eds.), *Analysis of delinquency and aggression* (pp. 203-231). Lawrence Erlbaum.
- Bazeley, P., & Jackson, K. (2013). *Qualitative data analysis with NVivo* (2nd ed.). Sage.
- Berends, M., & Zottola, G. (2009). A primer of survey methods. In S. D. Lapan & M. L. T. Quartaroli (Eds.), *Research essentials: An introduction to designs and practices* (pp. 79-101). Wiley.
- Biskup, C., & Pfister, G. (1999). I would like to be like her/him: Are athletes role-models for boys and girls? *European Physical Education Review*, 5(3), 199-218.
<https://doi.org/10.1177/1356336X990053003>
- Blaikie, N. (2007). *Approaches to social enquiry* (2nd ed.). Polity Press.
- Bosnjak, M., Brown, C. A., Lee, D. J., Yu, G. B., & Sirgy, M. J. (2016). Self-expressiveness in sport tourism: Determinants and consequences. *Journal of Travel Research*, 55(1), 125-134. <https://doi-org.ezproxy.library.sydney.edu.au/10.1177/0047287514535845>
- Chanda, S., Sahoo, S., & Sahni, S. (2021). Olympic rule 50: Bane toward human rights implications for the athletes. *Linguistics and Culture Review*, 5(3), 1489-1509.
<https://doi.org/10.21744/lingcure.v5nS3.1843>

Clavio, G., & Kian, T. M. (2010). Uses and gratifications of a retired female athlete's Twitter followers. *International Journal of Sport Communication*, 3(4), 485-500.

<https://doi.org/10.1123/ijsc.3.4.485>

~~Cummings, C. (2017). Cross-sectional design. In M. Allen (Ed.), *The Sage encyclopedia of communication research methods* (pp. 315-317). Sage.~~

~~<https://dx.doi.org/10.4135/9781483381411>~~

Dunn, C. (2016). Elite footballers as role models: Promoting young women's football participation. *Soccer and Society*, 17(6), 843-855.

<https://doi.org/10.1080/14660970.2015.1100893>

Duval, S., & Wicklund, R. A. (1972). *A theory of objective self awareness*. Academic Press.

Fitzclarence, L., & Hickey, C. (1998). Learning to rationalise abusive behaviour through football. In L. Fitzclarence, C. Hickey, & R. Matthews (Eds.), *Where the boys are: Masculinity, sport and education* (pp. 67-81). Deakin Centre for Education and Change.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative inquiry*. Aldine Publishing.

Globus, S. (1998). Athletes as role models. *Current Health*, 24(6), 25-28.

Gratton, C., & Jones, I. (2009). *Research methods for sport studies* (2nd ed.). Routledge.

Geurin, A. N. (2017). Elite female athletes' perceptions of new media use relating to their careers: A qualitative analysis. *Journal of Sport Management*, 31(4), 345-359.

<https://doi.org/10.1123/jsm.2016-0157>

Geurin, A. N. (2021). Social media education provided by national governing bodies of sport: an examination of practices for Youth Olympic Games and Olympic Games athletes. *Communication & Sport*. Advance online publication.

<https://doi.org/10.1177/21674795211053627>

- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59–82. <https://doi.org/10.1177/1525822X05279903>
- Hambrick, M. E., Simmons, J. M., Greenhalgh, G. P., & Greenwell, T. C. (2010). Understanding professional athletes' use of Twitter: A content analysis of athlete tweets. *International Journal of Sport Communication*, 3(4), 454-471. <https://doi.org/10.1123/ijsc.3.4.454>
- Hayes, M., Filo, K., Riot, C., & Geurin, A. (2019). Athlete perceptions of social media benefits and challenges during major sport events. *International Journal of Sport Communication*, 12(4), 449-481. <https://doi.org/10.1123/ijsc.2019-0026>
- Hemme, F., Marais, D. G., Bowers, M. T., & Todd, J. S. (2017). Extending sport-based entrepreneurship theory through phenomenological inquiry. *Sport Management Review*, 20(1), 92-104.
- Horsburgh, J., & Ippolito, K. (2018). A skill to be worked at: Using social learning theory to explore the process of learning from role models in clinical settings. *BMC Medical Education*, 18(1), 156–156. <https://doi.org/10.1186/s12909-018-1251-x>
- Hutchins, B., & Mikosza, J. (2010). The web 2.0 Olympics: Athlete blogging, social networking and policy contradictions at the 2008 Beijing Games. *Convergence*, 16(3), 279–297. <https://doi.org/10.1177/1354856510367618>
- IOC. (2012). *Youth Olympic Games event manual* (6th ed.). [Unpublished material]. Olympic Study Centre.
- IOC. (2015). *Youth Olympic Games event manual* (7th ed.). [Unpublished material]. Olympic Study Centre.
- IOC. (2016a). International Olympic Committee. *The fundamentals of Olympic values education* (2nd ed.). Produced by the International Olympic Committee Department of

Public Affairs and Social Development through Sport Lausanne, Switzerland.

<https://www.icsspe.org/system/files/The%20Fundamentals%20of%20Olympic%20Values%20Education.pdf>

IOC. (2016b). *Lillehammer 2016-YOG post-Games survey report*. [Unpublished material].

Olympic Study Centre, Olympic Games Department.

IOC. (2020). *Factsheet. The YOG- Facts and Figures*.

<https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Factsheets-Reference-Documents/Games/YOG/Factsheet-The-YOG-Facts-and-Figures.pdf>

IOC. (2021). *Sporting legends to mentor athletes at Nanjing 2014 Youth Olympic Games*.

<https://olympics.com/en/news/sporting-legends-to-mentor-athletes-at-nanjing-2014-youth-olympic-games>

IYOGOC. (2012). Innsbruck Youth Olympic Games Organising Committee. *BE PART OF*

IT! Official report of the Innsbruck 2012 Winter Youth Olympic Games. International Olympic Committee.

https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Games/YOG/Winter-YOG/YOG-Innsbruck-2012-Winter-Youth-Olympic-Games/Official-Report-Innsbruck-2012.pdf#_ga=2.19577976.1975916561.1558422480-1665596806.1534692087

Krieger, J. (2013). Fastest, highest, youngest? Analysing the athlete's experience of the

Singapore Youth Olympic Games. *International Review for the Sociology of Sport*, 48(6), 706-719. <https://doi.org/10.1177/1012690212451875>

Kristiansen, E. (2015). Competing for culture: Young Olympians' narratives from the first

winter Youth Olympic Games. *International Journal of Sport and Exercise Psychology*, 13(1), 29-42. <https://doi.org/10.1080/1612197X.2012.756259>

- Kuhn, K. A., & Rundle-Thiele, S. (2009). Curriculum alignment: Student perception of learning achievement measures. *International Journal of Teaching and Learning in Higher Education*, 21(3), 351-361.
- Leng, H. K., & Phua, Y. X. P. (2022). Athletes as role models during the COVID-19 pandemic. *Managing Sport and Leisure*, 27(1-2), 163–167.
<https://doi.org/10.1080/23750472.2020.1762330>
- LYOGOC. (2016). Youth Olympic Games Organising Committee. *BE PART OF IT! Official report of the Lillehammer 2016 Winter Youth Olympic Games*. Go beyond, Create tomorrow.
<https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Games/YOG/Winter-YOG/YOG-Lillehammer-2016-Winter-Youth-Olympic-Games/Lillehammer-2016-Official-Report.pdf>
- Meier, M. (2015). The value of female sporting role models. *Sport in Society*, 18(8), 968-982.
<https://doi.org/10.1080/17430437.2014.997581>
- Monnin, É. (2018). Olympic education and sports role models. *International Journal of Applied Sports Sciences*, 30(2), 91-97.
- Nordhagen, S. E. & Krieger, J. (2019). Coping with dual logics at one event: The participating athletes' perceptions from the 2016 Winter Youth Olympic Games. *International Journal of Sport & Society*, 11(1), 59–76.
<https://doi.org/10.18848/2152-7857/CGP/v11i01/59-76>
- NYOGOC. (2014). Nanjing Youth Olympic Games Organising Committee. *Chef de Mission Manual*. Olympic World Library. The Olympic Studies Centre.
<https://library.olympic.org/Default/doc/SYRACUSE/43637/chef-de-mission-manual-nanjing-2014-summer-youth-olympic-games-july-2014-nanjing-youth-olympic-games?lg=en-GB>

NYOGOC. (2015). Nanjing Youth Olympic Games Organising Committee. *SHARE THE GAMES SHARE OUR DREAMS*. Official Report of the 2nd Summer Youth Olympic Games Nanjing 2014.

<https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Games/YOG/Summer-YOG/YOG-Nanjing-2014-Youth-Olympic-Games/Official-Report-Nanjing-2014.pdf>

Parent, M. M., Kristiansen, E., & MacIntosh, E. W. (2014a). Athletes' experiences at the Youth Olympic Games: Perceptions, stressors, and discourse paradox. *Event Management, 18*(3), 303–324. <https://doi.org/10.3727/152599514X13989500765808>

Parent, M. M., Kristiansen, E. & MacIntosh, E. W. (2014b, August 12). *Report on the Impact of the Youth Olympic Games on Young Athletes and Young Ambassadors*. YOG Impact-Finale Report 08.12.2014. Presented to the International Olympic Committee. Ottawa, Canada: Author.

Parent, M. M., MacIntosh, E. W., Kristiansen, E., & Naraine, M. L. (2016). Report on the Young Athletes' Feedback Regarding the Lillehammer 2016 Winter Youth Olympic Games. Lillehammer 2016 Athletes Feedback-Draft report 07.05.2016. Presented to the International Olympic Committee. Ottawa, Author.

Parent, M. M., MacIntosh, E., Culver, D., & Naraine, M. L. (2019). *Benchmarking the Buenos Aires 2018 athletes' perspective for a longitudinal analysis of Youth Olympic Games athlete experience and learning*. International Olympic Committee.

Parry, J. (2012). Olympic education and the Youth Olympic Games. *Acta Universitatis Carolinae Kinanthropologica, 48*(1), 90–98.

Payne, W., Reynolds, M., Brown, S., & Fleming, A. (2003). Sports role models and their impact on participation in physical activity: A literature review. *Victoria: VicHealth, 74*(1), 1-55.

Peters, M., & Schnitzer, M. (2015). Athletes' expectations, experiences, and legacies of the Winter Youth Olympic Games Innsbruck 2012. *Journal of Convention & Event*

Tourism, 16(2), 116–144. <https://doi.org/10.1080/15470148.2015.1018656>

Rosner, B. (2000). *Fundamentals of biostatistics*. (5th ed.). Duxbury Press.

Schnitzer, M., Peters, M., Scheiber, S., & Pocecco, E. (2014). Perception of the culture and education programme of the Youth Olympic Games by the participating athletes: A

case study for Innsbruck 2012. *International Journal of the History of Sport*, 31(9),

1178–1193. <https://doi.org/10.1080/09523367.2014.909810>

Staalstroem, J. (2021). *The influence of the Youth Olympic Games education program on*

athletes [Unpublished doctoral dissertation]. The University of Sydney.

<https://hdl.handle.net/2123/26765>

SYOGOC. (2010). Singapore Youth Olympic Organising Committee. *Blazing the trail.*

official report of the Youth Olympic games Singapore 2010. International Olympic Committee.

<https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Games/YOG/>

[Summer-YOG/YOG-Singapore-2010-Youth-Olympic-Games/Official-Report-](https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Games/YOG/Summer-YOG/YOG-Singapore-2010-Youth-Olympic-Games/Official-Report-)

[Singapore-2010.pdf#_ga=2.44670948.1975916561.1558422480-](https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Games/YOG/Summer-YOG/YOG-Singapore-2010-Youth-Olympic-Games/Official-Report-Singapore-2010.pdf#_ga=2.44670948.1975916561.1558422480-)

[1665596806.1534692087](https://stillmed.olympic.org/media/Document%20Library/OlympicOrg/Games/YOG/Summer-YOG/YOG-Singapore-2010-Youth-Olympic-Games/Official-Report-Singapore-2010.pdf#_ga=2.44670948.1975916561.1558422480-1665596806.1534692087)

Tashakkori, A., & Creswell, J. W. (2007). The new era of mixed methods. *Journal of Mixed Methods Research*, 1(1), 3–7.

<https://journals.sagepub.com/doi/pdf/10.1177/2345678906293042>

Teigen, K. H., Normann, H. T. E., Bjørkheim, J. O., & Helland, S. (2000). Who would you most like to like? Adolescents' ideals at the beginning and the end of the

century. *Scandinavian Journal of Educational Research*, 44(1), 5-26. <https://doi->

[org.ezproxy.library.sydney.edu.au/10.1080/713696661](https://doi-org.ezproxy.library.sydney.edu.au/10.1080/713696661)

- Turková, K., Macková, V., & Němcová Tejkalová, A. (2021). Space for self-expression: Communication of Czech female athletes on social media and fans' reactions. *Acta Universitatis Carolinae Kinanthropologica*, 57(2), 147–172.
<https://doi.org/10.14712/23366052.2021.10>
- Wassong, S. (2006). Olympic education: Fundamentals, success and failures. In N. Crowther, M. Heine, & R. K. Barney (Eds.), *Cultural imperialism in action: Critiques in the global Olympic trust* (pp. 220-229). International Centre for Olympic Studies Publications. <https://www.uwo.ca/olympic/files/pdf/proceedings/proceedings-2006-toc.pdf>
- Wells-Wilbon, R., & Holland, S. (2001). Social learning theory and the influence of male role models on African American children in PROJECT 2000. *The Qualitative Report*, 6(4), 1-17. <https://doi.org/10.46743/2160-3715/2001.1994>
- Williams, J. R. (1993). Expression and communication as basic linguistic functions. *Intercultural Communication Studies*, 3(1), 91-101.
- Willig, C. (2008). A phenomenological investigation of the experience of taking part in 'extreme sports'. *Journal of Health Psychology*, 13(5), 690-702.
- WOA. (2017). *OLY post-nominal letters to honour Olympians*. World Olympians Association. <https://olympians.org/news/983/oly-post-nominal-letters-to-honour-olympians/>
- WYOGOCI. (2012). Winter Youth Olympic Games Organizing Committee Innsbruck. *Chefs de Mission Manual*. World Library. The Olympic Studies Centre.
<https://library.olympics.com/Default/doc/SYRACUSE/27384/chefs-de-mission-manual-innsbruck-2012>
- WYOGOCL. (2016). Winter Youth Olympic Games. Organizing Committee Lillehammer. *Chefs de Mission manual*. World Library. The Olympic Studies Centre.

<https://library.olympics.com/Default/doc/SYRACUSE/50582/chefs-de-mission-manual-lillehammer-2016-youth-olympic-games-publ-by-lillehammer-youth-olympic-games>

Xu, Q., & Armstrong, C. L. (2019). #SELFIES at the 2016 Rio Olympics: Comparing self-representations of male and female athletes from the U.S. and China. *Journal of Broadcasting & Electronic Media*, 63(2), 322–338.

<https://doi.org/10.1080/08838151.2019.1621138>