

RESEARCH

Open Access



Navigating sexual minority identity in sport: a qualitative exploration of sexual minority student-athletes in China

Meng Xiang^{1,2}, Kim Geok Soh^{2*}, Yingying Xu³, Seyedali Ahrari⁴ and Noor Syamilah Zakaria⁵

Abstract

Background Sexual minority student-athletes (SMSAs) face discrimination and identity conflicts in intercollegiate sport, impacting their participation and mental health. This study explores the perceptions of Chinese SMSAs regarding their sexual minority identities, aiming to fill the current gap in research related to non-Western countries.

Methods A qualitative methodology was adopted, utilising the Interpretive Phenomenological Analysis (IPA) approach with self-categorization theory as the theoretical framework. Participants were recruited through purposive and snowball sampling, and data were collected via semi-structured interviews, documents, and field notes. Sixteen former and current Chinese SMSAs participated in this study.

Results The study reveals four themes: hidden truths, prioritisation of athlete identity, self-stereotyping, and attempt. The results revealed that while SMSAs were common in intercollegiate sport, their identities were often concealed and not openly discussed. The predominant focus on athlete identity in sport overshadowed their sexual minority identities. Additionally, SMSAs developed self-stereotypes that influenced their thoughts and behaviours. The non-heterosexual team atmosphere in women's teams led to the development of intimate relationships among teammates.

Conclusions The findings from this study could be incorporated into existing sport policies to ensure the safe participation of SMSAs in Chinese intercollegiate sports. This research offers valuable insights for the development and implementation of inclusive policies. Future research in China could investigate the attitudes of coaches and heterosexual student-athletes toward sexual minority identities to inform targeted interventions.

Keywords Identity conflicts, Interpretive phenomenological analysis, Mental health, Team interaction, Self-categorization theory

*Correspondence:

Kim Geok Soh
kims@upm.edu.my

¹Department of Public Sports and Art Teaching, Hefei University, Hefei, China

²Department of Sport Studies, Faculty of Educational Studies, Universiti Putra Malaysia, Seri Kembangan, Malaysia

³Department of Marxism, West Anhui University, Luan, China

⁴Department of Professional Development and Continuing Education, Faculty of Educational Studies, Universiti Putra Malaysia, Seri Kembangan, Malaysia

⁵Department of Counsellor Education and Counselling Psychology, Faculty of Educational Studies, Universiti Putra Malaysia, Seri Kembangan, Malaysia



© The Author(s) 2024. **Open Access** This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

Background

Collegiate sport serves as a conduit for hope, competition, learning, success, and enhanced well-being for students [1, 2]. Within this context, situated at the intersection of student-athlete and sexual minority identities [3], sexual minority student-athletes (SMSAs) experience more challenges than their heterosexual counterparts. Sexual minority constitutes a group of individuals whose sexual and affectual orientation, romantic attraction, or sexual characteristics differ from that of heterosexuals. Sexual minority persons are inclusive of lesbian, gay, bi+, and asexual-identified individuals [4].

In an effort to enhance the support of SMSAs in sport, Team DC, the association of sexual minorities sport club, awarded seven SMSAs the 2023 Team DC College Scholarship [5]. Besides the Team DC scholarship, there are the Rambler Scholarship, US Lacrosse SMSAs Inclusion Scholarship, NCAA Women's Athletics Scholarship and Ryan O'Callaghan Foundation [6–8]. These scholarships were set up to make sport a more welcoming and safer environment for SMSAs. In particular, the Sexual Minority Scholarship echoes the International Olympic Committee's framework of equity, inclusion, and non-discrimination, which states that everyone has the right to participate in sport without discrimination and in a manner that respects their health, safety and dignity [9, 10].

Despite efforts by educational and sport organisations to foster inclusivity, research shows that the sport environment remains hostile to sexual minority individuals [11, 12]. In intercollegiate sport, empirical evidence points to persistent negative attitudes [13–17], which are expressed through marginalisation, exclusion, use of homophobic language, discrimination, and harassment [17–20]. SMSAs frequently confront the difficult choice of disclosing their identity, often opting for concealment. Denison et al. found that SMSAs who disclose their identity to their teams may face increased discrimination [21]. Pariera et al. also observed deep-rooted fears among SMSAs of being marginalised by their teams upon revealing their sexual orientation [22]. Consequently, the hostile environment led to lower participation rates among sexual minority youth compared to their heterosexual counterparts [23].

In China, there is a lack of clear public policies related to the sexual minority population [24]. Despite homosexuality being removed from the Chinese Classification of Mental Disorders-3 in 2001 [25]. China's stance towards sexual minority issues remains ambiguous. Many scholars describe this attitude as “no approval, no disapproval, and no promotion” [26–29]. Due to the lack of legal protection, sexual minorities frequently encounter discrimination. A Chinese national survey revealed that only 5.1% of sexual minority individuals felt comfortable being

open about their gender and sexual identity in China [30]. This discrimination is particularly severe among Chinese sexual minority youth, who are at higher risk of bullying in school and college [31, 32]. These youths face childhood victimisation [33–35], which heightens their risk of mental and behavioural health issues [36–38], including non-medical use of prescription drugs [39], depression [40, 41], and suicide [42].

While sports participation is crucial for the well-being of sexual minority individuals, research on the sports participation of sexual minority youth in China is limited. The literature highlights a significant gap in understanding the status and circumstances of SMSAs in China. Most existing studies focus on Western populations [43–45], overlooking the unique sociocultural interactions affecting SMSAs in non-Western contexts, making it challenging for China to apply these findings. Furthermore, the lack of reliable research on the interactions between sexual minorities and institutions in Chinese higher education hampers a comprehensive understanding of SMSAs' situations. This research gap impedes the development of effective interventions to foster inclusivity. Persistent discrimination and inadequate protective policies underscore the urgent need for academic, policy, and practical advancements to support sexual minorities in China [46]. Therefore, the aim of this study was to explore SMSAs' perceptions of their sexual minority identity in Chinese sports, providing insights to guide the creation of supportive educational and organisational strategies.

Homonegativity and discrimination in sport

Homonegativity refers to any prejudicial attitude or discriminatory behaviour directed towards an individual because of their homosexual orientation [47]. Compared to the more common term “homophobia,” [48] “homonegativity” more accurately describes negative attitudes towards homosexuality [49] because the fear is not irrational but is learned from parents, peers, teachers, coaches, and the daily interaction environment [50]. Sport context is an integral part of society, and an extensive body of research has consistently demonstrated the presence of homonegativity in sport [12, 21, 51–59].

Homonegativity can manifest in forms such as verbal harassment, physical violence, or discriminatory behaviours. The “Out on the Fields” survey, conducted in 2015, represents the first large-scale international study focusing on homophobia in sports [60]. Participants were from six countries: Canada, Australia, Ireland, the United States, New Zealand, and the United Kingdom. It revealed extensive discrimination in sport, with a high percentage of gay men and lesbians experiencing verbal slander, bullying, threats, and physical assault. The OUTSPORT project, completed in 2019 and funded by

the European Union, is the first comprehensive EU-wide study on homophobia and transphobia in sport. The project collected data from over 5500 sexual minority individuals across all 28 EU member countries [61]. The results revealed that a significant portion of participants faced adverse experiences in sport contexts related to their sexual orientation and gender identity, including verbal abuse, structural discrimination, physical boundary crossing, and violence. An overwhelming majority of respondents (92.9%) view homophobia and transphobia in sport as current issues. Additionally, 20% of respondents reported avoiding participation in sport due to concerns about their sexual orientation or gender identity, while 16% of active participants experienced at least one related negative incident in the past year. Notably, male student-athletes exhibited higher levels of homophobic attitudes compared to their female counterparts and non-physical education students [15, 16, 62]. Conversely, female athletes reported experiencing less fear of exclusion and a more inclusive team environment [22, 63, 64], highlighting significant gender disparities in homonegativity in sport.

Group and individual identity

The distinct team interaction inherent in sport may enhance or support expressions of homonegativity and discrimination, as Social Identity Theory posits that negative beliefs about certain groups may develop group identity [65–67]. This phenomenon is particularly noticeable in intercollegiate sport, where a strong emphasis on physical attributes and abilities often results in prejudices against those who deviate from established norms [16]. Such discrimination and mistreatment of SMSAs frequently stem from their teammates and coaches. Many SMSAs choose to conceal their sexual orientation due to fear of ostracism [60], with team members often identified as the primary perpetrators of discrimination [61].

Therefore, navigating sexual identity within intercollegiate sport is challenging for SMSAs, as their minority status becomes a focal point, impacting their overall experience [68, 69]. They encounter a unique psychological and emotional burden, striving to reconcile societal norms and expectations with their true selves. This constant negotiation and management of their identity across different contexts further complicates their experiences, frequently leading to difficulties in maintaining authenticity [19]. Therefore, SMSAs in intercollegiate sport face intricate challenges in balancing their authentic identity with societal norms, significantly impacting their experience and sense of self.

Theoretical framework

Self-categorisation theory (SCT), an extension of Social Identity Theory, provides a valuable perspective for

examining the perceptions of SMSAs in China, focusing on intragroup processes and individual navigation of personal and social identities [70, 71]. Key principles of SCT, including self-categorisation, salience, depersonalisation, and individuality [67], are instrumental in understanding how SMSAs navigate their sexual identities within the confines of sport norms. Applying SCT, this study could explore the complex interplay of intragroup relations and identity processes among SMSAs in the Chinese sport context, underscoring how contextual factors distinctly shape their identity.

Purpose of the study

The purpose of this study is to explore SMSAs' perceptions of their sexual minority identity within the Chinese sports context and understand how this identity influences their participation in sports. By illuminating the specific challenges and issues related to sexual minority identity in Chinese intercollegiate sports, this study provides a deeper understanding of the experiences of sexual minorities in this field.

Methods

Research design

This study was conducted with the interpretivist paradigm, which emphasises understanding the subjective experiences and meanings that individuals assign to their world. It posits that reality is not objective but is constructed through individual perceptions and social interactions [72]. Given the aim of exploring the perceptions of sexual minority identity in sport from SMSAs' perspectives, a qualitative research approach is appropriate. In line with the purpose of the study, the Interpretative Phenomenological Analysis (IPA) was adopted in this study, an approach aimed at understanding people's lived experiences and how they make sense of these experiences in the context of their personal and social worlds [73]. IPA research encompasses phenomenology, hermeneutics, and idiography and emphasises the personal significance of self-reflection among individuals with a shared experience in a specific context [74]. Additionally, IPA is particularly suitable for research focusing on identity and self-awareness [75]. The features and focus of IPA are consistent with the purpose of this study. Therefore, IPA was considered a suitable approach to explore the SMSAs' perceptions of their sexual minority identity within the sport context in China.

Researcher characteristics and reflexivity

During the data collection phase of this study, the first researcher was a Ph.D. candidate and had obtained her Ph.D. by the time of this manuscript's submission. Her doctoral committee continuously supervised the research. The first researcher's doctoral committee

Table 1 Inclusion criteria of participants

No.	Inclusion Criteria
1	Participants should be involved in or have participated in intercollegiate sport (no more than four years).
2	Participants must be over 18 years old.
3	Participants should self-identify as sexual minority individuals.
4	Participants should be Chinese.

members are proficient in qualitative research. The first researcher and the second coder have received systematic qualitative training, are skilled in qualitative analysis software (NVivo), and have published empirical studies using the IPA approach. Although none of the research team members were SMSAs, the first researcher and the second coder maintained long-term contact with SMSAs through their involvement in sport teams. The first researcher was a former student-athlete and is currently working as a coach. Given her background, she has had extensive time to interact with and understand SMSAs within student teams.

Participants and procedures

Purposive and snowball sampling methods were employed to recruit a homogeneous sample for this study, as recommended by Smith and Nizza [73]. Following approval from Universiti Putra Malaysia's Human Research Review Committee, the researcher initially reached out to SMSAs within her network, subsequently

expanding outreach through social media to reach a broader pool of potential participants. The participants were selected based on specific inclusion criteria (Table 1), ensuring relevance to the study's focus. Of the 22 individuals contacted, 16 agreed to participate, while six individuals declined participation due to concerns regarding potential exposure. The sample included a diverse representation of sexual minority subgroups: one asexual man, four bisexual women, three gay men, and eight lesbians. Given the relatively low prevalence of asexual individuals [76, 77], we only had one participant from this subgroup. Strict confidentiality measures were enforced, with participants assigned pseudonyms and their college affiliations omitted for anonymity. The demographic details of the participants are outlined in Table 2.

In phenomenological research, the focus is on rich individual experiences rather than data saturation [78]. Similarly, IPA research aims to explore participants' personal and social worlds through detailed, in-depth analysis [79]. Smith and Nizza [73] also highlighted that in IPA research, sample size is less crucial because of the emphasis on detailed analysis in small, homogeneous samples. Therefore, the richness of data and the depth of insight into each participant's experience are more important than the number of participants or reaching data saturation. This study utilised IPA's in-depth analytical approach with sixteen participants to provide detailed

Table 2 Demographic information of participants

No.	Pseudonyms	Age	Sport	Sport status	Years in Sport	Sexual orientation	Data collection method (length)
1	Lucas	25	Volleyball	Former	4	Asexual	Face-to-face Interview (45 min)
2	Joy	23	Volleyball and Soccer	Current	5	Bisexual	Online Interview (90 min)
3	Mia	25	Volleyball	Former	6	Bisexual	Face-to-face Interview (42 min)
4	Jackie	24	Volleyball and Basketball	Current	6	Bisexual	Face-to-face Interview (85 min) & Journal
5	Savannah	24	Volleyball	Former	5	Bisexual	Face-to-face Interview (58 min)
6	Adam	25	Volleyball	Current	6	Gay	Essay (4 times)
7	William	26	Volleyball	Former	6	Gay	Online Interview (64 min)
8	Royal	22	Volleyball	Current	4	Gay	Online Interview (58 min)
9	Sophia	25	Volleyball	Former	4	Lesbian	Online Interview (87 min)
10	Zoe	26	Volleyball, Soccer and Basketball	Former	12	Lesbian	Face-to-face Interview (63 min)
11	Ruby	18	Track and Field	Current	6	Lesbian	Online Interview (52 min)
12	Jan	20	Track and Field and Tennis	Current	4	Lesbian	Online Interview (40 min)
13	Emma	21	Martial arts	Current	3	Lesbian	Online Interview (55 min)
14	Charlotte	18	Volleyball and Basketball	Current	4	Lesbian	Online Interview (45 min)
15	Ava	18	Basketball and Track and Field	Current	5	Lesbian	Online Interview (72 min)
16	Anna	25	Swimming, Track and Field and Cheerleading	Former	10	Lesbian	Face-to-face Interview (90 min)

data. This methodological approach allows for a comprehensive exploration of individual experiences, aligning with the study's objectives.

Data collection

Data for this study were collected through semi-structured interviews (Appendix A), allowing participants to choose the mode, time, and location, including face-to-face or online sessions on Chinese social networks. Each interview's length is detailed in Table 2, with an average duration of 63 min. Before each interview, participants signed informed consent forms following a detailed briefing on the study's purpose and procedures. Given the sensitive nature of the research, the interviews were conducted solely between the researcher and the participant to ensure a safe and comfortable environment, fostering open and honest communication.

The methods of data collection exhibited some qualitative differences. In face-to-face interviews, participants were often cautious and hesitant to share personal experiences. Conversely, online interviews proved more effective, as participants felt more relaxed, leading to quicker rapport and greater openness. This difference likely stems from the reduced perceived risk of exposure in an online setting. Due to the clear objectives of the study and the structured interview guide, there were no differences between the data from current SMSAs and former SMSAs.

Notably, one participant provided data through written essays instead of a semi-structured interview due to

concerns about exposure and discomfort. After discussing the matter, the participant agreed to respond to interview questions in written form. The first researcher sent the interview questions to the participant, who then provided written responses. Follow-up questions were asked based on these initial responses, resulting in four sets of essay responses. This approach, which aligns with the conventions of phenomenological research [80], allowed the participant to express their experiences comfortably. The essay data were analysed alongside the semi-structured interview data, with common themes identified across all responses.

Documents and field notes supplemented the data collection. Documents included photographs, videos, and diaries. With participant consent, these documents were analysed for relevance to the research purpose. Field notes captured contextual information during both face-to-face and online interviews, including keywords and participants' pauses and intonations, with immediate elaboration post-interview to avoid biases [81, 82]. These detailed notes contextualised data analysis [74] and contributed to the research's credibility.

Data analysis

The data analysis in this study followed a seven-step process aligned with IPA research guidelines and contemporary IPA terminology. The data analysis procedure is depicted in Fig. 1. The IPA analysis is iterative and inductive [83], involving the organisation of data into a structured format for easy tracking through various stages

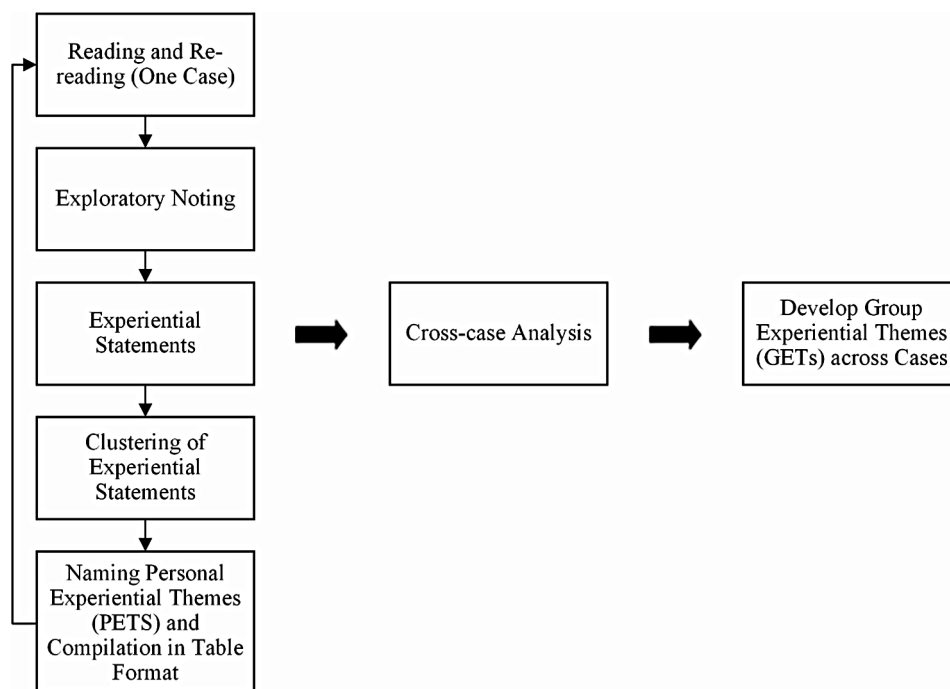


Fig. 1 Data Analysis Procedure. Adapted from Smith et al. (74)

Table 3 Good quality for IPA studies

No.	Good Quality for IPA Studies
1	The study clearly subscribes to the theoretical principles of IPA: it is phenomenological, hermeneutic, and idiographic.
2	The study promotes transparency in describing the data collection and analysis for readers to understand the methodology employed.
3	The study effectively sampled from the corpus, ensuring evidence density for each theme. Extracts from at least three participants were provided for each theme when the participant count exceeded 8.
4	The study focuses on the sports experiences of SMSAs in China, offering an in-depth analysis of this topic.

Table 4 Rigor of the study

Internal validity	External validity	Reliability	Others
Triangulation	Thick description	Audit trail	COREQ checklist
Member checking	Diversity of the sample	Peer review	IPA quality evaluation guide
Peer review		Research reflexivity	
Research reflexivity			

– from initial exploratory notes on transcripts to the development of empirical statements, theme clustering, and final group theme structure. The theoretical framework was incorporated at the final stage of empirical theme development.

To enhance the study’s validity, the first author invited another Ph.D. candidate to participate in the data analysis process. After the interview recordings were translated into transcripts using audio software, the first researcher listened to the recordings repeatedly to correct the transcripts. The second coder reviewed the recordings to ensure the transcriptions were accurate and verbatim. The first author employed NVivo software (released in March 2020) for coding, and the second coder utilised manual coding. All data were analysed in Chinese to maintain linguistic integrity and then translated into English for theme presentation.

Rigour

The procedures of this study adhered to the COREQ Checklist [84] (Appendix B) and the IPA Quality Evaluation Guide [85] to ensure rigour. The research met the good quality requirements for IPA studies as outlined by Smith [85] (Table 3). Throughout the research, emphasis was placed on internal validity, external validity, and reliability to maintain the study’s rigour and quality. The methods employed to address these aspects are summarised in Table 4.

Table 5 Main themes and occurrence

No.	Group Experiential Themes (GETs)	Sub-themes	Occurrence
1	Hidden truths	SMSAs are Common in Sport Silent Identity	Joy, Mia, Jackie, Savannah, Adam, William, Royal, Sophia, Zoe, Charlotte, Ava, and Anna.
2	Prioritisation of athlete identity	Be an Athlete Sport Performance First norms	Joy, Mia, Jackie, Adam, Royal, Zoe, Ruby, Jan, Charlotte, Emma, Ava and Anna.
3	Self-stereotyping	Specific physical traits Behavioural tendencies	Joy, Jackie, William, Royal, Sophia, Zoe, Ruby, and Ava
4	Attempt	Prolonged Contact Leading to Intimacy Influence from Sexual Minority Teammates	Lucas, Joy, Mia, Jackie, Savannah, Zoe, Ruby, and Ava.

Results

This study explored SMSAs’ perceptions of sexual minority identity within intercollegiate sport in China. From the perspective of SCT, the results uncovered four key themes from SMSA’s team-based interactive experiences. The research themes, along with their corresponding sub-themes and occurrences, are presented in Table 5.

Hidden truths

The hidden truths refer to facts, scenarios, or knowledge that are not commonly known or readily available. In this study, the existence of SMSAs in intercollegiate sport was undeniable, yet it remained concealed due to the prevailing lack of transparency.

SMSAs are common in sport

This research uncovered the extensive existence of SMSAs in Chinese sport. Almost all participants acknowledged the ubiquity of sexual minorities in sport, with 12 out of the 16 participants specifically highlighting the presence of SMSAs in collegiate sport:

I think everyone is generally aware of sexual minorities; all people are aware of them to a greater or lesser extent. It is generally agreed that the existence of sexual minorities is a common phenomenon in modern society, and even more so in Sport, as anyone involved in sport knows that (Adam).

Participants frequently described the presence of SMSAs in intercollegiate sport, using terms like “widespread”, “common”, “normal”, and “quite many”. Several participants also provided specific details about the number of SMSAs in their respective teams. Jackie remarked, “At

that time, half of my teammates were lesbians” (Jackie). Similarly, Zoe noted the significant presence of SMSAs in her team, “I think it (the number of SMSAs) was almost half of the team at that time. But I don’t know about the senior players; almost half of our junior players were SMSAs” (Zoe).

Silent identity

Participants noted the prevalence of SMSAs in sport but also emphasised the difficulty of openly discussing sexual minority identity in this context. They described the sport environment as reserved and lacking open conversations about SMSAs and their experiences.

The reticent nature of sport teams regarding sexual minority identity was evident in their attitudes. William observed, “I feel like most of my teammates just don’t take a stand. They don’t want to make a statement about SMSAs. Nor did they say they supported it or didn’t support it” (William). Similarly, Mia considered sexual minority identity as a personal issue, inappropriate for open discussion.

No one wants to ask or discuss this openly...we live in a very conservative environment all the time, and none of this content is something that teammates should be concerned about, and people would feel offended if you don’t handle it well (Mia).

Some SMSAs viewed avoiding discussions on sexual minorities in sport as respectful to teammates, aiming for a comfortable, stress-free environment. Joy said, “We came here to play, right? I don’t think any of the other players want to feel phased by who you are” (Joy). Mia echoed this sentiment:

...in team training, the game is the game, and I rarely bring other emotions into it... In the company of most of our teammates, we don’t interact with each other in that way. It’s probably a default rule that respect is distance, I guess (Mia).

Charlotte, involved in volleyball and basketball, recounted a teammate’s public derogation due to her sexual minority identity, an incident not openly addressed by the team. She perceived sexual identity as a “taboo” topic. The narratives revealed a cautious approach among SMSAs towards expressing their sexual minority identity in sport. They felt compelled to carefully manage their sexual orientation, minimising its disclosure. This hesitancy likely stemmed from the existing reticence and limited acceptance of SMSAs in sport, fostering a sense of invisibility and concern over potential negative consequences.

Prioritisation of athlete identity

The theme of prioritisation of athlete identity suggests that for SMSAs, their identity as an athlete may play a more prominent or influential role in shaping their self-conception compared to their sexual minority identity.

Be an athlete

Several participants believed their primary role as student-athletes was to engage in sport, and they valued this aspect of their identity significantly. Joy expressed this sentiment, “I love volleyball very much ... I don’t care much about relationships; I just love volleyball, and I think we are all here to do this, and nothing else matters. You don’t need to stress about it (sexual minority identity)” (Joy).

Emma echoed a similar perspective, noting, “I think my teammates are very professional; our program requires a high technical standard, and we spend most of our time training; other than that, things don’t seem that important” (Emma). When queried about the importance of sexual minority identity, she responded, “Yes, at least not concerning sport performance, or maybe it will have a bad effect” (Emma). Additionally, some participants felt that in the context of sport, sexual minority identity might be sidelined. Adam commented:

“We don’t share it (sexual minority identity) unless someone asks. We’re a team first, and then we’re individuals, and for me, I’m important personally, but in the team, we all probably need to sacrifice some of ourselves to make the team more united and stronger” (Adam).

Participants’ views as both student-athletes and sexual minorities highlighted contrasts in the intercollegiate sport environment. Their student-athlete identity was key in shaping self-perception and fostering a sense of community, while their sexual minority identity was often marginalised in aspects of interpersonal relations, team support, and self-identity development.

Sport performance first norms

In team sport, leaders are crucial in creating inclusive spaces for SMSAs and setting behavioural and attitudinal standards, including those towards SMSAs. In this study, some participants believed that coaches’ criteria for acceptance of sexual minority individuals or intra-team romantic relationships were based on athletic performance.

Some coaches firmly believe that team relationships negatively impact team performance and, therefore, strictly prohibit romantic relationships between teammates. Joy recalled,

She couldn't accept that... she thinks being an athlete like that is ridiculous. It would make a mess; her team would be in a mess. She said you two are dating and that playing will affect your emotions, which means she meant to say there is no way I can treat another girl as a normal teammate... (Joy).

In contrast, some coaches adopt a more tolerant attitude. Jackie's coach believes that if the team's overall performance is not affected, issues such as sexual orientation or team relationships can be ignored. Jackie stated, "My coach is male and old, but he should know what's going on, especially since our captain has dated several teammates and the coach pretends not to know. He would only care if we were winning games" (Jackie).

Whether it instructs prohibition or an indifferent attitude, both narratives reflect that the team's norms for inclusivity are based on sport performance. These norms also influence how SMSAs assess their own sexual minority identity within the team, as Adam said:

As of now, I have someone in the team that I have a crush on and haven't dated. Maybe if he and I argued over training or a game, it would affect the performance of the team and the relationship between teammates.... I don't think I could let that happen (Adam).

The participants' narratives emphasise how the "Sports Performance First" norms influence the attitudes and behaviours of coaches and SMSAs within the team. These norms not only shape the team culture but also profoundly affect how SMSAs navigate their identities and relationships in the team environment.

However, the excessive focus on sport performance highlights the athletic identity of student-athletes while neglecting their other identities, especially those of sexual minorities. This singular focus leads to the neglect of the personal needs and diverse identities of athletes. Although these measures may seem to ensure the overall performance of the team, they overlook the psychological health and holistic development needs of the individuals.

Self-stereotyping

Self-stereotyping denotes the tendency of SMSAs to describe themselves using stereotypical attributes in the sport context. These descriptions frequently align with stereotypical perceptions prevalent in the external environment. SMSAs tend to be perceived as having specific physical traits or behavioural tendencies.

Specific physical traits

Sophia provided an illustrative example of self-stereotyping through her personal experience. She commented:

In the beginning, I would think that if you are an SMSA, you must fit some characteristics. For example, at that time, I saw some lesbians in my team who had short hair or wore baggy t-shirts; I was a bit frustrated by my long hair and feminine appearance...and I felt that I might not quite fit those criteria. So, then I cut my hair and even wore a wrapping bra to the training ground (Sophia).

Sophia's narrative underscores how the pressure to conform to certain physical traits led her to change her appearance to fit the stereotypical image of an SMSA within the sport context.

Behavioural tendencies

In addition to physical traits, SMSAs also feel compelled to conform to certain behavioural tendencies that are stereotypically associated with SMSAs. Zoe explained, "Because of who I am (T), I felt I should have to perform stronger, so I put up with much training.... I felt I should be there to protect the other players; if I were vulnerable, I would look down on myself" (Zoe). This indicates a sense of obligation among some female SMSAs to embody strength, aligning with the stereotypical image of female SMSAs in sport. Conversely, male SMSAs in men's teams often faced stereotypes of being fragile, weak, or exhibiting feminine traits. Royal noted that behaviours of some male SMSAs, like engaging in non-sport-related banter, led to gossip and negative perceptions within men's sport. To avoid these stereotypes, Royal aimed to mimic the mannerisms of heterosexual athletes, as he explained:

I try to avoid being close to the team's prominent male SMSAs and try to stay out of related conversations; I don't want to be a standard gay; I want to have the same college life as the rest of the team (heterosexuality) (Royal).

Stereotypes in sport often forced SMSAs into roles incongruent with their authentic identities, significantly impacting their self-expression and identity. The pressure to conform to societal norms in sport settings created internal conflicts for SMSAs, challenging their ability to maintain their true sense of self.

Attempt

This theme addresses situations where student-athletes engage in intra-team intimacy or mimic being SMSAs in sport. This attempt has two key elements: prolonged contact leading to intimacy and influence from sexual minority teammates.

Prolonged contact leading to intimacy

Participants noted that extensive training and competition schedules in sport fostered close bonds among team members. Lucas shared, “When we were preparing for the tournament, we trained together every morning and evening...the game spanned for almost a month, and after that, we felt as close as family to our teammates” (Lucas). Similarly, Ruby pointed out, “Back then, we were training every afternoon until late at night; it was quite hard (the training was very strenuous) ... it lasted for six months” (Ruby). These prolonged interactions sometimes led to the development of more profound attractions among student-athletes.

“I think we had many moments of trust and intimacy together on the field that built up some heartfelt feelings. These feelings made me feel emotions beyond that of a teammate.... Then I realised that gender might not be so important because it’s hard to build that kind of relationship in a typical romance” (Savannah).

Influence from sexual minority teammates

Participants also described how interactions with sexual minority teammates led them to explore their own sexual identities, as illustrated by Ava’s recounting of her initial same-gender relationship experience:

That time we went out to a tournament, and I found that four of my teammates, three of them were lesbians...we didn’t have games at night, so they had been talking to their girlfriends every night on the phone, and I just felt as if that was not too bad. Probably influenced by them, I got a girlfriend at that tournament as well.... Even though we broke up when we returned, I could accept girls (Ava).

Mia described a similar experience:

There were some lesbians in my team, and then it just seemed natural that I got close to one of them.... Well, I was thinking about whether that relationship would affect the team. But then I found out that there were other couples on the team. So, I feel like I wasn’t doing anything wrong (Mia).

The phenomenon highlights the significant role of peer influence in team settings. When individuals are around many teammates in same-gender relationships, it fosters an environment that normalises such relationships. Notably, this influence is not coercive but stems from observing and interacting with teammates who are comfortable with their sexual orientations. This environment

helps individuals feel accepted and more confident in exploring their identities and relationships.

Discussion

This study explored the perceptions of SMSAs regarding their sexual identity within intercollegiate sport in China. Its importance lies in its contribution to understanding the complex realities of SMSAs in China, an area that has lacked depth in the literature. By reaffirming the necessity of examining these athletes’ experiences, this study reveals the intricate conflict between adhering to team norms and expressing personal characteristics within the context of the Chinese social and cultural background.

The results show that SMSAs are a recognised reality in Chinese intercollegiate sport, consistent with findings from Western countries. While precise figures of sexual minorities in sport may vary across countries, it is acknowledged that they are present at all competitive levels, from school and college sport to the professional sphere [22, 86–91]. Although no national census on sexual minorities in China or in sports environments exists, related research indicates that many college and university students self-identify as sexual minorities. For instance, an online survey conducted across 26 colleges and universities in 10 Chinese provinces found that over 8% of students identify as sexual minorities [36]. Additionally, another national survey revealed that nearly a quarter of college students identify as non-heterosexual [92]. Recognising and addressing the unique challenges faced by sexual minority youth, who make up a notable percentage of the student population, is essential for sport and educational institutions.

Despite the apparent prevalence of SMSAs, the study confirms that their identities often remain hidden in the context of Chinese intercollegiate sport. This can be attributed to two main reasons: First is the concern about discrimination if exposed. Chinese sexual minorities frequently report experiencing abuse or discrimination in families, schools, and workplaces [93]. Additionally, conversion therapies and discriminatory counselling practices persist in mental health services [94], creating an environment where discrimination is a significant concern, thereby reducing the likelihood of SMSAs coming out in the sports environment. The second reason is the constraint of traditional Chinese culture. The dominant Confucian culture in China emphasises harmony, internalised homonegativity, and conformity [95, 96], often at the expense of individual expression and identity development. This cultural backdrop influences how sexual minorities perceive their own identities [97] and creates an ideological constraint that leads to social rejection and resistance towards sexual minorities [98], thereby reducing the visibility of sexual orientation-related topics in the Chinese sport context.

Moreover, SMSAs in China often prioritise their athlete identity over their sexual minority identity, influenced by the attitudes of team leaders. This tendency is reinforced by coaches who primarily focus on the biological sex of athletes and lack training or understanding related to sexual minority issues [99]. Consequently, the Chinese coaches' lack of knowledge about sex and sexual orientation exacerbates the silence surrounding sexual minority identities in the Chinese collegiate sport environment and intensifies the identity conflict for SMSAs. Emphasising athletic performance is central in sport but should not overshadow the holistic development of student-athletes. McCavanagh and Cadaret [100] noted that student-athletes might face challenges in reconciling various aspects of their identity in a heteronormative sport context. The suppression of sexual minority identity can lead to isolation from potential support systems that nurture positive sexual and gender identities. Prioritising athletic success over broader student development in sport departments limits growth opportunities for all students, including SMSAs. Chavez et al. [101] emphasised that student development requires recognising and valuing diversity, suggesting that a singular focus on athletic prowess can diminish the benefits of diversity among student-athletes. Embracing diversity is not only a personal journey but also one that can enhance the collective experience within sport settings.

In addition, self-stereotyping within SCT involves aligning one's self-concept with the characteristics of valued social categories [102]. Latrofa [103] suggests that members of low-status groups, like SMSAs in sport, may self-stereotype to align more closely with their group, reflecting recognition of lower status and self-perception through peers. This study revealed SMSAs shape their self-identity based on the attitudes prevalent in their sport environment, with influences from peers and coaches being internalised as personal attitudes [104]. Such self-stereotyping supports maintaining a favourable social identity and adhering to group norms but can reinforce negative stereotypes and prejudices within sport.

Internalising stereotypes may lead SMSAs to develop prejudices against themselves and others, perpetuating discrimination. It can also hinder individual development, impacting self-esteem and confidence. For example, aligning with negative stereotypes could cause SMSAs to doubt their worth and capabilities, affecting emotional well-being and satisfaction. Liu and Song's [105] survey of Chinese college students illustrated the direct impact of gender self-stereotypes on life satisfaction, highlighting the significant effects of self-stereotyping on individual well-being.

Furthermore, in the context of traditional and reserved Chinese culture, intercollegiate sport offers a relatively free and open space for sexual minority women. The

results of this study suggest that the visibility of sexual minority women in teams and the long time spent together allow these athletes to explore and establish intimate relationships. These results are similar to findings in Spanish studies [103], which highlighted the protective and liberating role of sports teams in the sexual exploration of female sexual minority athletes. Research by Organista and Kossakowski on Polish female footballers [106] and Xiong and Guo [96] on Chinese women's basketball teams also revealed a climate of non-heteronormativity in women's sport. These climates provide a sanctuary from heterosexual pressures, allowing sexual minority athletes to engage in sport free from traditional constraints. Such environments help female sexual minority athletes navigate and subvert heteronormative norms by cultivating supportive subcultural networks within their teams.

Conclusion

This study addresses the lack of in-depth research on the experiences of SMSAs in Chinese intercollegiate sport. It fills the gap by exploring the complex realities of SMSAs, focusing on their identity conflicts and the influence of the Chinese social and cultural background. Specifically, this study provides valuable insights that align with SCT [71]. This study addresses a notable gap in the existing literature regarding sexual minority sport participation, as rarely have these perceptions been explored. Drawing from the lens of SCT, the results of this study revealed several valuable insights into how their sexual minority identity impacts their participation in sport. These findings not only enhance our understanding of how SCT applies to the sport experiences of sexual minority individuals but also contribute to the advancement of SCT in research on sexual minority sport participation. The themes uncovered in this study closely align with central SCT concepts such as identity salience, self-stereotyping, and depersonalisation, illuminating the ways SMSAs comprehend and express their sexual minority identity within the intercollegiate sport context. SCT, with its focus on both intragroup and intergroup relations within the multifaceted construct of the self, offers valuable insights into the complexities of SMSAs' self-perceptions and the intricacies involved in developing and manifesting their identities in the realm of sport.

Based on the results, more effort needs to be put into understanding sexual minority identities in intercollegiate sport. By examining the perspectives and experiences of SMSAs, we can gain insights into the interactions and influences of sexual minority individuals in the sport context. The interplay between an individual's self-perception and situational dynamics results in a self-identity that mirrors the collective. In addition, the prevalent pressures and normative prejudices inherent

in the sport system significantly influence their self-identity. Therefore, valuing SMSAs' understanding of their self-identity shows respect for each person's differences and rights. We hope the findings will be incorporated into existing sport policies to promote inclusivity and ensure safe participation for sexual minority students. To encourage and support the full development of SMSAs, college athletics and related institutions should prioritise understanding and respecting their perceptions of their sexual minority identity. By doing so, institutions can create a more inclusive and supportive environment that acknowledges and addresses the unique challenges faced by SMSAs.

Nevertheless, caution should be exercised when generalizing the findings, especially for subgroups with low representation, such as asexual individuals. While the study provides valuable insights into SMSAs' perceptions of their sexual minority identity within the Chinese sport context, the limited number of asexual participants means their unique perspectives may not be fully captured. Therefore, these findings may not fully represent all sexual minority subgroups.

Future research could focus on exploring the perceptions and experiences among various sexual minority subgroups within sport participation in China. Additionally, considering the cultural diversity across China's vast geographic regions, it would be valuable to examine how SMSAs perceive their minority identity in different cultural contexts. Given the scarcity of related studies in China, it is also important to survey other stakeholders in the sport environment, such as coaches and heterosexual student-athletes, to gain a broader understanding of perceptions of sexual minority identities. These insights can inform the development of targeted interventions aimed at ensuring the safe and inclusive participation of SMSAs in intercollegiate sport.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12889-024-19824-9>.

Supplementary Material 1

Supplementary Material 2

Acknowledgements

Not applicable.

Author contributions

Conceptualisation, MX; methodology, MX; data collection, MX and YX; data analysis, MX and YX; data curation, MX; writing—original draft preparation, MX; writing—review and editing, KS, SA, and NZ; supervision, KS, SA, and NZ. All authors have read and agreed to the published version of the manuscript.

Funding

No funding.

Data availability

The datasets generated and/or analysed during the current study are not publicly available due to ethical considerations but are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

This study involving human participants was conducted in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The research was approved by the Ethics Committee of Universiti Putra Malaysia.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Received: 23 January 2024 / Accepted: 17 August 2024

Published online: 25 August 2024

References

- Gallup. A STUDY OF NCAA, STUDENT-ATHLETES. : Undergraduate Experiences and Post-College Outcomes. 2020.
- Graupensperger S, Panza MJ, Budziszewski R, Evans MB. Growing into us: trajectories of Social Identification with College Sport teams Predict Subjective Well-Being. *Appl Psychol Health Well Being*. 2020;12(3):787–807.
- Gohn LA, Albin GR. Understanding college student subpopulations: a guide for student affairs professionals. *NASPA Student Affairs Administrators In Higher Education*; 2006.
- American Psychological Association. APA Task Force on Psychological Practice with Sexual Minority Persons. Guidelines for Psychological Practice with Sexual Minority Persons. *American Psychologist*. 2021.
- Team DC. 2023 Scholarship Recipients-Team DC awarded the following seven student-athletes with scholarships in 2023: Team DC; 2023 [cited 2023 July, 22]. <https://teamdc.org/scholarships/>
- Porter M. Check out these LGBTQ student-athlete scholarship opportunities: Various organizations give out scholarships to LGBTQ students and student-athletes 2021 [updated Mar 31, 2021]. <https://www.outsports.com/lgbtq-high-school-athlete-resources/2021/3/31/22310564/lgbtq-student-athlete-scholarship-list>
- lacrosse U. USA LACROSSE LGBTQ+ INCLUSION SCHOLARSHIP 2023 [<https://www.usalacrosse.com/lgbtq-plus-scholarship>
- National Collegiate Athletic Association. Ethnic Minority and Women's Enhancement Graduate Scholarship 2023 [<https://www.ncaa.org/sports/2013/11/21/ethnic-minority-and-women-s-enhancement-graduate-scholarship.aspx>
- Pigozzi F, Bigard X, Steinacker J, Wolfarth B, Badietia V, Schneider C, et al. Joint position statement of the International Federation of Sports Medicine (FIMS) and European Federation of Sports Medicine Associations (EFSMA) on the IOC framework on fairness, inclusion and non-discrimination based on gender identity and sex variations. *BMJ Open Sport Exerc Med*. 2022;8(1):e001273.
- International Olympic Committee. IOC Framework on fairness, inclusion and non-discrimination on the basis of gender identity and sex variations. 2021.
- Denison E, Bevan N, Jeanes R. Reviewing evidence of LGBTQ+ discrimination and exclusion in sport. *Sport Manage Rev*. 2020;24(3):389–409.
- Symons CM, O'Sullivan GA, Polman R. The impacts of discriminatory experiences on lesbian, gay and bisexual people in sport. *Annals Leisure Res*. 2017;20(4):467–89.
- Anderson AR, Smith CM, Stokowski SE. The impact of Religion and Ally Identity on individual sexual and gender prejudice at an NCAA Division II institution. *J Issues Intercol Athletics*. 2019;12(2):154–77.
- Toomey RB, McGeorge CR, Carlson TS. Athletes' perceptions of the climate for sexual and gender minority athletes and their intervention in bias. *J Study Sports Athletes Educ*. 2018;12(2):133–54.

15. Roper EA, Halloran E. Attitudes toward Gay men and lesbians among Heterosexual male and female student-athletes. *Sex Roles*. 2007;57(11):919–28.
16. O'Brien KS, Shovelton H, Latner JD. Homophobia in physical education and sport: the role of physical/sporting identity and attributes, authoritarian aggression, and social dominance orientation. *Int J Psychol*. 2013;48(5):891–9.
17. Gill DL, Morrow RG, Collins KE, Lucey AB, Schultz AM. Perceived climate in physical activity settings. *J Homosex*. 2010;57(7):895–913.
18. Petty L, Trussell DE. Experiences of identity development and sexual stigma for lesbian, gay, and bisexual young people in sport: 'Just survive until you can be who you are'. *Qualitative Res Sport Exerc Health*. 2018;10(2):176–89.
19. Anderson AR, Stokowski S, Smith CML, Turk MR. You have to validate it: experiences of female sexual minority student-athletes. *J Homosex*. 2021;1–22.
20. Storr R, Nicholas L, Robinson K, Davies C. Game to play?: barriers and facilitators to sexuality and gender diverse young people's participation in sport and physical activity. *Sport Educ Soc*. 2022;27(5):604–17.
21. Denison E, Jeanes R, Faulkner N, O'Brien KS. The relationship between 'Coming out' as Lesbian, Gay, or bisexual and experiences of homophobic Behaviour in Youth Team sports. *Sexuality Res Social Policy*. 2021;18(3):765–73.
22. Pariera K, Brody E, Scott DT. Now that they're out: experiences of College Athletics Teams with openly LGBTQ players. *J Homosex*. 2021;68(5):733–51.
23. Kulick A, Wernick LJ, Espinoza MAV, Newman TJ, Dessel AB. Three strikes and you're out: culture, facilities, and participation among LGBTQ youth in sports. *Sport Educ Soc*. 2019;24(9):939–53.
24. Jeffreys E. Public policy and LGBT people and activism in mainland China. *Routledge handbook of the Chinese communist party*. Routledge; 2017. pp. 283–96.
25. Chinese Classification of Mental Disorders. Classification and diagnostic criteria of Mental disorders in China. Shandong: Shandong Publishing House of Science and Technology; 2001.
26. Wei W. The normalization project: the Progress and limitations of promoting LGBTQ Research and Teaching in Mainland China. *J Homosex*. 2020;67(3):335–45.
27. Shaw G, Zhang X. Cyberspace and gay rights in a digital China: Queer documentary filmmaking under state censorship. *China Inform*. 2018;32(2):270–92.
28. Zhao P, Cao B, Bien-Gund CH, Tang W, Ong JJ, Ding Y, et al. Identifying MSM-competent physicians in China: a national online cross-sectional survey among physicians who see male HIV/STI patients. *BMC Health Serv Res*. 2018;18(1):1–9.
29. Xu G, Wang X, Budge SL, Sun S. We don't have a template to follow: sexual identity development and its facilitative factors among sexual minority men in the context of China. *J Couns Psychol*. 2022.
30. Suen YT, Chan RCH, Badgett MVL. The experiences of sexual and gender minorities in employment: evidence from a large-scale survey of Lesbian, Gay, Bisexual, Transgender and Intersex People in China. *China Q*. 2021;245:142–64.
31. Liu X, Peng C, Huang Y, Yang M, Wen L, Qiu X, et al. Association between sexual orientation and school bullying behaviors among senior high school students. *Chin J Public Health*. 2020;36(6):880–3.
32. Wang Y, Yu H, Yang Y, Li R, Wilson A, Wang S, et al. The victim-bully cycle of sexual minority school adolescents in China: prevalence and the association of mood problems and coping strategies. *Epidemiol Psychiatr Sci*. 2020;29:e179.
33. Li X, Zheng H, Tucker W, Xu W, Wen X, Lin Y et al. Research on relationships between sexual identity, adverse childhood experiences and Non-suicidal Self-Injury among Rural High School Students in Less developed areas of China. *Int J Environ Res Public Health*. 2019;16(17).
34. Zhao M, Xiao D, Wang W, Wu R, Zhang W, Guo L, et al. Association among Maltreatment, Bullying and Mental Health, Risk Behavior and sexual attraction in Chinese students. *Acad Pediatr*. 2021;21(5):849–57.
35. Zhao J, Teng S, Zhang X, Yang X, Chen J. Change in sexual orientation identity and its influencing factors among college students. *Chin J Public Health*. 2018;34(4):563–6.
36. Zhang Y, Fu F. Investigation on Mental Health Status of Sexual Minority College Students based on National Samples of China. *Chin J Clin Psychol*. 2019;27(5):997–1002.
37. Wen G, Zheng L. The influence of internalized Homophobia on Health-related quality of life and life satisfaction among Gay and Bisexual men in China. *Am J Mens Health*. 2019;13(4):1557988319864775.
38. Xu W, Zheng L, Xu Y, Zheng Y. Internalized homophobia, mental health, sexual behaviors, and outness of gay/bisexual men from Southwest China. *Int J Equity Health*. 2017;16(1):36.
39. Li P, Huang Y, Guo L, Wang W, Xi C, Lei Y, et al. Sexual attraction and the non-medical use of opioids and sedative drugs among Chinese adolescents. *Drug Alcohol Depend*. 2018;183:169–75.
40. Shi J, Dewaele A, Lai W, Lin Z, Chen X, Li Q, et al. Gender differences in the association of sexual orientation with depressive symptoms: a national cross-sectional study among Chinese college students. *J Affect Disord*. 2022;302:1–6.
41. Guo M, Wang Y, Duan Z, Wei L, Li S, Yan H. Depressive symptoms, perceived social support and their correlation among adolescent lesbians. *Chin J Public Health*. 2021;37(12):1805–8.
42. Huang Y, Li P, Guo L, Gao X, Xu Y, Huang G, et al. Sexual minority status and suicidal behaviour among Chinese adolescents: a nationally representative cross-sectional study. *BMJ Open*. 2018;8(8):e020969.
43. Denison E, Bevan N, Jeanes R. Reviewing evidence of LGBTQ+ discrimination and exclusion in sport. *Sport Manage Rev*. 2021;24(3):389–409.
44. Abreu RL, Audette L, Mitchell YL, Simpson I, Ward J, Ackerman L, et al. LGBTQ student experiences in schools from 2009–2019: a systematic review of study characteristics and recommendations for prevention and intervention in school psychology journals. *Psychol Sch*. 2019;59(1):115–51.
45. Mann M, Krane V. Inclusion or illusion? Lesbians' experiences in sport. *Sex, gender, and sexuality in Sport*. Routledge; 2019. pp. 69–86.
46. Tang R, Feng Y. Bibliometric analysis of studies on homosexuality in the Chinese psychology. *J Jiangxi Normal University(Philosophy Social Sci Edition)*. 2018;56(6):108–14.
47. MORRISON TG, McLEOD LD, MORRISON MA, ANDERSON D, O'CONNOR WE. Gender stereotyping, Homonegativity, and misconceptions about sexually coercive behavior among adolescents. *Youth Soc*. 1997;28(3):351–82.
48. Weinberg GH. *Society and the healthy homosexual*. New York: St. Martin; 1972.
49. HEREK GM. On heterosexual masculinity:some Psychological consequences of the Social Construction of Gender and sexuality. *Am Behav Sci*. 1986;29(5):563–77.
50. Barber H, Krane V. Creating a positive climate for Lesbian, Gay, Bisexual, and Transgender youths. *J Phys Educ Recreation Dance*. 2007;78(7):6–52.
51. Anderson E. Openly Gay athletes:contesting hegemonic masculinity in a homophobic environment. *Gend Soc*. 2002;16(6):860–77.
52. Lenskyj H. Power and play: gender and sexuality issues in Sport and Physical Activity. *Int Rev Sociol Sport*. 1990;25(3):235–45.
53. Smith M, Cuthbertson S, Gale N. Out for sports -tackling Homophobia and Transphobia in Sport Content. Edinburgh, Edinburgh: Equality Network; 2012.
54. Anderson E, Bullingham R. Openly lesbian team sport athletes in an era of decreasing homophobia. *Int Rev Sociol Sport*. 2015;50(6):647–60.
55. Saraç L, McCullick B. The life of a gay student in a university physical education and sports department: a case study in Turkey. *Sport Educ Soc*. 2017;22(3):338–54.
56. Kavasoğlu İ, Anderson E. Gay men and masculinity in a homophobic Turkish body building culture. *J Gend Stud*. 2021;31(7):812–24.
57. Morales L, White AJ. Perception versus reality: Gay male American athletes and coming-out stories from outsports. *Com. LGBT athletes in the sports media*. 2019:27–50.
58. Scandurra C, Braucci O, Bochicchio V, Valerio P, Amodeo AL. Soccer is a matter of real men? Sexist and homophobic attitudes in three Italian soccer teams differentiated by sexual orientation and gender identity. *Int J Sport Exerc Psychol*. 2019;17(3):285–301.
59. Rollè L, Cazzini E, Santoniccolo F, Trombetta T. Homonegativity and sport: a systematic review of the literature. *J Gay Lesbian Social Serv*. 2022;34(1):86–111.
60. Denison E, Kitchin A. Out on the fields: The first international study on homophobia in sport. *Nielsen Sport, Bingham Cup 2014, Sydney Convicts, Sport Australia*; 2015.
61. Menzel T, Braumüller B, Hartmann-Tews I. The relevance of sexual orientation and gender identity in sport in Europe: findings from the outsport survey. *Cologne: German Sport University Colognen, Istitute of Sociology and Gender Studies*; 2019.
62. Tseng Y-H, Sum RK-W. Attitudes of Taiwan and Hong Kong collegiate student athletes towards homosexuality in sport participation. *Asia Pac J Sport Social Sci*. 2017;6(3):267–80.
63. Velez L, Piedra J. Does sexuality play in the stadium? Climate of tolerance/rejection towards sexual diversity among soccer players in Spain. *Soccer Soc*. 2018;21(1):29–38.
64. Halbrook MK, Watson JC, Voelker DK. High School coaches' experiences with openly lesbian, Gay, and bisexual athletes. *J Homosex*. 2019;66(6):838–56.

65. Hunter JA, Kypri K, Stokell NM, Boyes M, O'Brien KS, McMenamin KE. Social identity, self-evaluation and in-group bias: the relative importance of particular domains of self-esteem to the in-group. *Br J Soc Psychol*. 2004;43(1):59–81.
66. Tajfel H, Turner JC. The social identity theory of intergroup behavior. *Political psychology: Psychology*; 2004. pp. 276–93.
67. Trepte S, Loy LS. Social Identity Theory and Self-Categorization Theory. In: Rössler P, Hoffner CA, Zoonen L, editors. *The International Encyclopedia of Media Effects* 2017. pp. 1–13.
68. Rankin SS, Merson D. 2012 LGBTQ National College Athlete Report. Charlotte, NC: Campus Pride; 2012.
69. Fynes JM, Fisher LA. Is authenticity and Integrity possible for sexual minority athletes? Lesbian Student-Athlete experiences of U.S. NCAA Division I Sport. *Women Sport Phys Activity J*. 2016;24(1):60–9.
70. Ellemers N, Haslam SA. Social identity theory. *Handb Theor Social Psychol*. 2012;2:379–98.
71. Turner JC, Hogg MA, Oakes PJ, Reicher SD, Wetherell MS. *Rediscovering the social group: A self-categorization theory*. Cambridge, MA, US: Basil Blackwell; 1987. x, 239-x, p.
72. Creswell JW, Poth CN. *Qualitative inquiry and research design: choosing among five approaches*. Sage; 2016.
73. Smith JA, Nizza IE. *Essentials of interpretative phenomenological analysis*. Washington, DC, US: American Psychological Association; 2022. viii, 94-viii, p.
74. Smith JA, Flowers P, Larkin M. *Interpretative Phenomenological Analysis: Theory, Method and Research*. London: SAGE Publications Ltd; 2021. <http://digital.casalini.it/9781529780796>
75. Eatough V, Smith JA. *Interpretative phenomenological analysis. The Sage handbook of qualitative research in psychology*. 2017:193–209.
76. Rothblum ED, Krueger EA, Kittle KR, Meyer IH. Asexual and Non-asexual respondents from a U.S. Population-based study of sexual minorities. *Arch Sex Behav*. 2020;49(2):757–67.
77. Aicken CR, Mercer CH, Cassell JA. Who reports absence of sexual attraction in Britain? Evidence from national probability surveys. *Asexuality and Sexual Normativity*: Routledge; 2015. pp. 10–24.
78. Van Manen M, Higgins I, van der Riet P. A conversation with Max Van Manen on phenomenology in its original sense. *Nurs Health Sci*. 2016;18(1):4–7.
79. Smith JA, Flower P, Larkin M. *Interpretative phenomenological analysis: theory, Method and Research*. *Qualitative Res Psychol*. 2009;6(4):346–7.
80. Groenewald T. A Phenomenological Research Design Illustrated. *Int J Qualitative Methods*. 2004;3(1):42–55.
81. Asplund M, Welle CG. *Advancing Science: how Bias holds us back*. *Neuron*. 2018;99(4):635–9.
82. Lofland J, Lofland LH. *Data logging in observation: Fieldnotes*. London: Sage; 1999.
83. Smith JA. Hermeneutics, human sciences and health: linking theory and practice. *Int J Qualitative Stud Health Well-being*. 2007;2(1):3–11.
84. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care*. 2007;19(6):349–57.
85. Smith JA. Evaluating the contribution of interpretative phenomenological analysis. *Health Psychol Rev*. 2011;5(1):9–27.
86. Georgiou YS, Patsantaras N, Kamberidou I. Homophobia predictors—A case study in Greece: heterosexual physical education student attitudes towards male and female homosexuality. *J Phys Educ Sport*. 2018;18:1209–16.
87. Halbrook M, Watson JC. High school coaches' perceptions of their efficacy to work with lesbian, gay, and bisexual athletes. *Int J Sports Sci Coaching*. 2018;13(6):841–8.
88. Atteberry-Ash B, Woodford MR. Support for policy protecting LGBT Student athletes among heterosexual students participating in Club and Intercollegiate sports. *Sexuality Res Social Policy*. 2017;15(2):151–62.
89. Mullin EM, Cook S. Collegiate coach attitudes towards lesbians and gay men. *Int J Sports Sci Coaching*. 2020;16(3):519–27.
90. Cassidy WP. *Sports journalism and women athletes: Coverage of coming out stories*. Springer Nature; 2019.
91. Martos-García D, García-Puchades W, Soler S, Vilanova A. From the via Crucis to Paradise. The experiences of women football players in Spain surrounding gender and homosexuality. *Int Rev Social Sport*. 2023;0(0):10126902231153349.
92. China Family Planning Association. 2019–2020 National College Student sexual and Reproductive Health Survey Report. China Family Planning Association; 2020.
93. United Nations Development Programme. *Being LGBTI in China - A National Survey on Social Attitudes towards Sexual Orientation, Gender Identity and Gender Expression*. 2016.
94. Suen YT, Chan RCH. A nationwide cross-sectional study of 15,611 lesbian, gay and bisexual people in China: disclosure of sexual orientation and experiences of negative treatment in health care. *Int J Equity Health*. 2020;19(1):46.
95. Nguyen T, Angelique H. Internalized Homonegativity, Confucianism, and self-esteem at the emergence of an LGBTQ Identity in Modern Vietnam. *J Homosex*. 2017;64(12):1617–31.
96. United States Census Bureau. *US and World Population Clock 2020* [<https://www.census.gov/popclock/world>]
97. Hu X, Wang Y. LGB identity among young Chinese: the influence of traditional culture. *J Homosex*. 2013;60(5):667–84.
98. Xu L, Bao Y. Study on the influence of traditional confucianism on the Social attitude of homosexuality in Contemporary China. *Chin Med Ethics*. 2019;32(6):733–6.
99. Tseng Y-H, Sum RK-W. The attitudes of collegiate coaches toward gay and lesbian athletes in Taiwan, Hong Kong, and China. *Int Rev Social Sport*. 2020;56(3):416–35.
100. McCavanagh TM, Cadaret MC. Creating safe spaces for lesbian, gay, bisexual, transgender, and queer (LGBTQ+) student-athletes. *Affirming LGBTQ+ students in higher education. Perspectives on sexual orientation and gender diversity*. Washington, DC, US: American Psychological Association; 2022. pp. 141–59.
101. Chavez AF, Guido-DiBrito F, Mallory SL. Learning to value the other: a framework of individual diversity development. *J Coll Student Dev*. 2003;44(4):453–69.
102. Turner JC, Reynolds KJ, Self-Categorization T. 2012 2023/06/09. In: *Handbook of Theories of Social Psychology* [Internet]. London: SAGE Publications Ltd. https://sk.sagepub.com/reference/hdbk_socialpsychtheories2
103. Latrofa M, Vaes J, Cadinu M. Self-stereotyping: the central role of an ingroup threatening identity. *J Soc Psychol*. 2012;152(1):92–111.
104. Seddig D. Individual attitudes toward deviant behavior and perceived attitudes of friends: self-stereotyping and Social Projection in Adolescence and Emerging Adulthood. *J Youth Adolesc*. 2020;49(3):664–77.
105. Liu Y, Song J. The relationship between gender self-stereotyping and life satisfaction: the Mediation Role of Relational Self-Esteem and Personal Self-Esteem. *Front Psychol*. 2022;12.
106. Organista N, Kossakowski R. Enclaved non-heteronormativity and pragmatic acceptance. The experiences of Polish female football players. *Int Rev Social Sport*. 2023;0(0):10126902231180402.

Publisher's note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.