



From the School Gym to Adulthood: Gendered Pathways of Physical Education and Post-Divorce Physical Activity in China

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From the school gym to adulthood: gendered pathways of physical education and post-divorce physical activity in China

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ABSTRACT

Chinese scholarship underexamines how gender intersects with health and physical education (HPE) curricula and girls' PE experiences — particularly in shaping physical activity (PA) participation across the lifespan. Western research shows that single mothers exhibit lower PA levels and higher health-risk levels than married mothers do, yet research investigating Chinese single mothers' PA is particularly sparse despite a surging divorce rate. This study examines how gender and HPE curricula across educational stages in China have influenced girls' PE experiences and how these experiences have shaped divorced single mothers' (DSMs) adult PA participation. Twenty-eight semi-structured interviews were analysed using thematic analysis and interpreted through gender socialisation and post-socialist feminism. Results manifest that gender and HPE curricula collectively produced gendered PE engagement regarding PA types, intensity, and duration through girls' interactions with PE teachers and peers, and gendered expectations reinforced girls' marginalisation. Evidence indicates that gender inequality in PE and expectations placed on DSMs jointly contribute to low health and PA awareness and reduce adult PA, particularly post-divorce. These findings highlight the necessity of structural and cultural shifts to disrupt entrenched gender norms, promote gender-equitable HPE curriculum, support girls' active engagement in PE, and advance DSMs' access to health, PA, and self-care.

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Introduction

Early physical education (PE) experiences shape lifelong health trajectories. Research consistently demonstrates that PE engagement during childhood and adolescence enhances both immediate physical activity (PA) levels and long-term health outcomes (da Silva, 2022; García-Hermoso et al., 2023). Yet the mechanisms whereby gendered PE experiences translate into sustained patterns of physical inactivity (PIA) among women – particularly marginalised groups such as divorced single mothers (DSMs) – remain unclear. This knowledge gap is especially pronounced in China, where, despite a 17-fold increase in divorce rates since 1978 (from 0.2‰ to 3.4‰ in 2019) (Ministry of Civil Affairs of China (MoCAoC), 2023), DSMs' health and PA participation have received minimal scholarly attention.

There is limited evidence on the long-term impact of PE on adult PA in China. The China Health and Nutrition Survey (1989–2011) (Zhang et al., 2014) remains the only longitudinal dataset that

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examined PA domains rather than PE exposure. Moreover, previous studies are largely quantitative, offering limited insights into how Chinese women's past PE experiences shape their adult PA from a life-course, qualitative perspective. Despite multiple PE curriculum reforms globally, persistent gender expectations continue to shape women's PA trajectories and reinforce ongoing gender disparities in PE and PA participation (Mayo et al., 2018; Ransdell et al., 2004). The World Health Organisation (WHO, 2024) reported that globally, PIA was more prevalent among women (34%) than men (29%). Yet, researchers have underexplored how PE engagement across school years influences – adult women's PA, particularly single mothers.

Divorced women in China have been marginalised in research. According to gender scholars, institutional and political constraints have perpetuated underrepresentation of women outside normative family structures, specifically divorced women (Zurndorfer, 2018). This raises concern as the soaring divorce rate in China means a growing number of divorced women, many of whom are also mothers. Single mothers face complicated barriers, such as low income and child-care demands, hindering PA participation (Dlugonski et al., 2017). Consequently, when divorced single mothers' (DSMs) social identities (e.g. gender, parental status) intersect with gendered PE experiences, this intersection may constrain their PA. Nevertheless, these constraints remain underexplored.

This study addresses three interconnected gaps. First, it provides the first longitudinal, qualitative examination of how PE experiences across all educational stages (primary school through university) shape Chinese women's adult PA. Second, it centres the experiences of DSMs – a population rendered underrepresented within both Chinese sport scholarship and family research. Third, it theoretically advances a localised feminist approach by employing post-socialist feminism to interpret how state-market-family gender regimes condition both PE engagement and post-divorce PA. Through 28 in-depth interviews with DSMs, this study asks: How have gendered expectations and HPE curricula across educational stages shaped girls' PE experiences, and how do these experiences continue to influence their PA participation after divorce? It seeks to guide gender-equitable HPE curricula and inclusive PA practices to improve DSMs' PA, health outcomes, and self-care.

PE and gender

Despite girls' increasing opportunities for PE, the complexity of gender in this field has been underestimated, and achievements overestimated (Oliver & Kirk, 2015). PE in the UK had been gendered since its appearance, with practices being linked to gender stereotypes around femininity and masculinity (Kirk, 2002). This restricted most girls' opportunities for female-oriented PA options that would train them with skills for maintaining healthy and active lifestyles (Azzarito et al., 2006). Recent research (Preece & Bullingham, 2022) reveals that girls worldwide continue to face persistent gender inequality, structured by stereotypes in social, educational, and familial contexts. Hence, further research should explore how gendered power dynamics in PE constrain girls' engagement and fail to guide inclusive curriculum development.

These patterns assume particular salience in China. China's PE system evolved from Soviet-influenced mass physical culture through reforms claiming people-centered orientation while embedding masculine sporting traditions (Wang et al., 2021; Zhang & Tang, 2016). This tension between socialist-era egalitarian rhetoric and Confucian gender norms creates a site for examining gendered inequality reproduction.

Gender-focused PE research in China has underexamined structural inequality in PE. Despite evidence that gendered peer dynamics and male-oriented HPE curricula marginalise girls and sustain a gender-segregated PA culture (Hu & Yuan, 2015; Wang et al., 2021), research offers limited insights into how curricula reproduce gender inequality and how girls experience PE. Given China's 688-million female population (State Statistics Bureau of China (SSBoC), 2021), gender-focused PE research amplifying girls' and women's voice is imperative for addressing this source of gender inequality.

PE engagement and long-term PA participation

Research consistently shows PE engagement during childhood and adolescence promotes higher PA levels in adulthood. Data from 65 countries suggest adolescents attending PE three times weekly were twice as active, with consistent effects across age and gender (Uddin et al., 2020). Daily PE increased the likelihood of meeting movement guidelines in adolescence and adulthood (García-Hermoso et al., 2023), while negative experiences predicted disengagement (Ladwig et al., 2018). Promoting inclusive PE is therefore critical for lifelong PA.

Despite this robust international evidence, research in China has concentrated on either macro-level curriculum reforms (Yang et al., 2025) or micro-level implementation (Liu et al., 2023), overlooking long-term PA trajectories. The only two longitudinal studies on school PA have both investigated visual health outcomes (Cui et al., 2022; Zhang et al., 2025), rather than PE's sustained impact on adult PA participation. This absence is particularly problematic given evidence that early gendered socialisation in PE produces lasting effects on women's health behaviours (Ruiz-Montero et al., 2020). Moreover, no research has examined these relationships among specific vulnerable populations, such as DSMs, who face intersecting constraints related to gender, parental status, and socioeconomic precarity.

Divorce, single motherhood, and PA participation

Divorce and single motherhood strongly influence women's PA levels. Single mothers consistently report lower PA levels than married mothers, often failing to meet recommended moderate-to-vigorous PA (MVPA) goals. They engage in significantly less annual activity ($F(2, 61) = 8.65, p = .001$) and MVPA ($F(2, 58) = 4.39, p = .02$) (Dlugonski & Motl, 2013). Their activity also tends to centre on low-intensity forms (e.g. home workouts) rather than gym-based exercise (Pino Gavidia et al., 2023). These patterns reflect external constraints, including childcare and time pressures (Dlugonski & Motl, 2014), with relative inactivity persisting and generating elevated risks of chronic illness and later-life disability (Hoch et al., 2024).

Despite a 3.5-fold increase in China's divorce rate over two decades (Chai et al., 2024), research on DSMs has mainly emphasized financial challenges (Li, 2020) and children's well-being (Zhang, 2020), with minimal attention to PA. Empirical work appeared only last year 2016, mainly addressing 019 personal and organizational barriers (Zhou et al., 2025). Most studies on DSMs in China remain descriptive, lacking theoretical grounding in gender or feminist frameworks. . Consequently, there is limited evidence of how intersecting factors - gender, single motherhood, and PE experiences – jointly shape DSMs' PA participation. This study addresses these gaps by offering a gender-informed, theoretically grounded analysis of DSMs' PA participation.

Theoretical framework

The study employs a feminist qualitative approach to explore the relationship between women's PE experiences and adult PA participation. Gender socialisation theory informs the data analysis, while post-socialist feminism helps situate findings within China's broader historical, cultural, and political contexts. This dual lens allows the examination of how gendered socialisation and these distinctive contexts shape DSMs' PE experiences and PA participation.

Gender socialisation theory

Gender socialisation theory illuminates how social norms, cultural expectations, and institutional practices shape identities, behaviours, and gendered roles across the life trajectory. It conceptualises the process through which individuals internalise norms of 'appropriate' gender behaviour via interactions with key socialising agents such as family and school (West & Zimmerman, 1987). This process is considered a central mechanism in reproducing gender inequality (Ridgeway & Correll,

2004). Education, as a key agent of socialisation, reinforces such inequality through peer interactions, teacher expectations, curricula, and institutional norms (Kollmayer et al., 2018). Gender socialisation is particularly pronounced in PE as institutionalised sexism has been found to consistently structure curricular and pedagogical approaches (Talbot, 1993). Hence, although girls enjoy PA and acknowledge its benefits, they face barriers (e.g. fear of judgement) (Cowley et al., 2021). These early lessons produce diminished physical self-perception and confidence in PA engagement and reduced participation throughout life (Ruiz-Montero et al., 2020). A review of 65 studies on gender equality in PE revealed that gender bias persistently hinders girls' engagement and emphasised the urgent need to promote gender equality through culturally responsive interventions (İşikgöz et al., 2025). Thus, applying gender socialisation theory to Chinese girls' PE experiences provides critical insights into how gendered norms within the PE context shape their engagement.

Post-socialist feminism in the Chinese context

While gender socialisation provides the primary lens, the Chinese context requires a localized feminist approach (Mohanty, 2003) conceived as a constellation of transnational perspectives engaging with unique socio-historical contexts (Zheng, 2016).

Drawing upon post-socialist feminism, which critiques state discourse and challenges epistemologies that oversimplify lived gendered experiences (Wesoky 2002), this study conceptualizes DSMs' PA experiences as governed by intersecting Confucian gender norms, socialist egalitarian legacies, and neoliberal discourses of individual responsibility. Post-socialist feminism explores gendered subjectivities' reconstruction in societies shifting from socialist to market economies (Barlow, 2004; Rofel, 2007), where individuals negotiate gender norms through discourse, power, and emotion in contexts where womanhood is politicized, moralized, and marketized (Ahmed, 2013). Post-socialist feminism highlights contradictions of state-promoted gender equality, where women perform paid labor while undertaking primary domestic duties, creating a sustained 'double burden' (Wang, 2016; Wesoky, 2002). It examines how market reforms and revived Confucian ideals reconstruct womanhood as moralized identity around family duty, performing gendered virtue through motherhood while denying women's recognition as rights-holders in public and private spheres (Cai & Liu, 2015). These perspectives conceptualize how neoliberal self-care narratives and Confucian moralism co-construct a state–market–family gender regime that governs DSMs' post-divorce PA. They also contribute to interpreting DSMs' ambivalent negotiations with these dynamics, primarily through deference and strategic performance.

The present study employs a dual theoretical framework that works synergistically: gender socialisation theory explains how gendered norms are internalised and enacted in PE and PA settings, while post-socialist feminism situates these experiences within China's unique historical, cultural, and political contexts.

Methods

Philosophical orientation

This study adopted a qualitative interpretivist paradigm, viewing social reality as constructed through interaction, culture, and meaning (Denzin et al., 2023). It aimed to understand how Chinese DSMs interpret their PE and PA experiences within gendered social structures, echoing the theoretical framework emphasizing socio-cultural construction of gender.

Research design

A qualitative research design was chosen to pursue an in-depth exploration of DSMs' PE and PA experiences. Given the limited evidence about DSMs' PA in China, a qualitative inquiry based on

semi-structured interviews was selected because it allows the flexibility to foreground participants' voices while situating them within broader socio-cultural contexts.

Participants and recruitment

Participants were recruited through Chinese social media (Xiaohongshu, a platform similar to Instagram) and snowball sampling. Eligibility criteria required participants to be DSMs with higher education, sole custody of at least one child, and current residence in a Chinese provincial capital. The study focused on heterosexual DSMs. Twenty-eight participants were recruited, aged between 28 and 59 years ($M = 40.35$), with a disproportionate distribution across age groups. Eighteen resided in Beijing, while the remaining ten were distributed evenly across Shanghai, Guangzhou, Shenzhen, Hangzhou, and Hefei. Their backgrounds varied, representing both rural and urban upbringings, and their DSM status spanned from six months to 21 years. The principal investigator (PI) introduced the study via text messages. The PI's experiences as a primary caregiver facilitated rapport-building and empathetic engagement.

Data collection

Data was collected through online semi-structured interviews (SSIs) conducted in Mandarin, Chinese, the shared language of both the PI and participants. According to Brinkmann (2022), SSI helps educate the key features of human interaction and elicit in-depth accounts of participants' experiences. Online interviews reduce costs, reach dispersed populations, and facilitate discussion of sensitive topics through privacy and anonymity (Salmons, 2014).

Data collection commenced after ethical approval was granted by [to be added after peer-review] in March 2024 and concluded in November 2024. Twenty-eight visually anonymous (participants' preference) one-to-one online SSIs were conducted, producing 3,192 min of voice data with an average of 1 h and 54 min per interview. Interviews were conducted via Tencent Meetings (internationally known as VooV Meeting), China's leading video-conferencing platform. This platform bridged the geographic distance between UK-based researchers and China-based participants. Interviews were audio-recorded with the participants' consent and transcribed verbatim in Chinese using the iFLYKET transcription service, with proofreading for accuracy and selected excerpts translated into English.

Questions probed both participants' PE and post-divorce PA experiences. PE-related questions were sequenced chronologically, from primary school to university. Sample interview questions included:

- 1: How have your PE experiences at your primary/middle/high school and university affected your PA participation now? Did boys and girls have different experiences in PE lessons then? If so, how, and why?
- 2: Was your PE at school integrated with health education? If so, how? If not, why not?
- 3: How often do you participate in PA since becoming a DSM?
- 4: Do you have sufficient time to participate in PA now? Why or why not?
- 5: If you don't have enough PA, what are the main barriers to your participation?

These questions were designed to elicit reflections on structural and personal dimensions of PE experience and PA participation, resonating with the theoretical lenses of gender socialisation and post-socialist feminism.

Analytical approach

Thematic analysis

Thematic Analysis (TA) was used to identify, analyse, and interpret recurring patterns of meaning within participants' accounts, highlighting their lived experiences, behaviours, and practices

(Braun et al., 2016; Braun & Clarke, 2006). Braun and Clarke's (2006) framework established TA as a flexible, theoretically independent method suited to exploring how social discourses shape experience, making it appropriate for interpretivist research (Braun & Clarke, 2012).

Following Braun and colleagues' (Braun, et al., 2016; Braun & Clarke, 2022) reflexive model, this study approached TA as an iterative and interpretive process rather than a mechanistic coding practice. Reflexive TA foregrounds researcher subjectivity, continuous reflexivity, and recursive engagement with the data. It emphasises depth of interpretation, coherence of theme development, and theoretical alignment over formulaic reliability measures. This reflexive stance acknowledges that the interaction between researcher, data, and theoretical lens construct meanings.

Consistent with Braun and Clarke's (2006) six-phase framework [(1) familiarisation with data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report], the analytical process in this study was recursive and iterative. Thematic maps were developed throughout to visualise relationships between themes and ensure conceptual coherence.

Both inductive (data-driven) and deductive (theory-driven) approaches were employed. Inductive analysis (Frith & Gleeson, 2004) allowed themes to emerge organically from participants' narratives, while deductive analysis applied the study's theoretical frameworks to interpret how broader structural and cultural forces shaped individual experiences. Following established best practice in sport and exercise research (Lim et al., 2021), this reflexive approach facilitated a nuanced interpretation of both explicit and implicit meanings, linking participants' accounts of PE and PA to the wider socio-cultural and gendered dynamics of contemporary China.

Data analysis

Participants chose their own pseudonyms to protect confidentiality. Their age and geographic origin before attending university were provided when first mentioned in the results section to help readers contextualise their lived PE experiences. Transcripts were analysed using TA, and identified themes were translated into English and discussed within the research team. This analytical method was chosen for its flexibility and suitability for identifying recurring patterns of meaning across the dataset. To enhance rigour and trustworthiness, a reflexive journal was kept throughout the research process to document positionality and analytic decisions. Preliminary findings were shared with two participants in an informal feedback session, enabling participant reflection on whether interpretations matched their experiences. Additionally, peer debriefing with feminist qualitative research colleagues was employed to challenge assumptions and improve interpretations.

Results

Gendered expectations and early socialisation in PE

Participants unanimously concurred that gendered expectations created a key barrier to school PE and extra-curricular PA, with HPE curriculum in basic education permeated by gender bias. They identified gender disparity driven by teachers' gendered expectations, masculine values, and gendered curricula. PE teachers made gendered demands: girls ran and jumped while boys played ball games. Sun (48, Urumqi) recalled middle school PE lessons as boys being encouraged to play ball games, while girls just chatted in the playground. PE teachers occasionally assigned girls some tasks, such as practising the long jump, but they rarely verified completion. Even when students did the same PA, intensity and duration differed significantly: boys were expected to run faster, jump higher, and exercise longer. Sun's experiences were echoed by Luo (58, Shijiazhuang) and Lang (28, Anhui), who reported similar gendered stereotypes despite a 30-year age gap. Luo reflected on her middle school PE experiences from four decades ago:

PE teachers had boys play football while girls ran laps. Teachers were stricter with boys, requiring them to run four laps versus girls' two.

Moreover, Participants reported girls received less attention than boys from the predominantly male teaching workforce. Huang (41, Anhui) revealed that her primary school PE teachers interacted more with boys, leaving girls feeling neglected. This sentiment was echoed by Jiang, who described how that neglect was manifested:

When boys felt like they couldn't keep going, the teacher would urge them to push through. But when girls struggled to move forward, the teacher just turned a blind eye to them. (Jiang, 40, Beijing)

Although several participants had female PE teachers, they did not report receiving more attention. Girls frequently cited menstrual cramps to justify absences from PE. Female teachers displayed deeper empathy and were less demanding than male counterparts. Accordingly, participants noted decreased PE engagement upon reaching puberty compared to pre-pubescent years. Yang (41, Zhejiang) reflected: 'Before class, teachers would ask girls to raise their hands if they were on their period. If so, they were excused from all PAs'. Menstruation was mentioned as a common excuse from PE by all participants when they were reluctant to participate. Cai (44, Hunan) recounted the tricks girls employed to evade PE: 'Many girls feigned menstruation to avoid PA. Teachers generally didn't intervene; if a student requested leave, it was granted'. Thus, during menstruation, girls encountered both lower teacher expectations and reduced self-expectations. Tian (38, Beijing) revealed that whenever girls in her middle school were assigned less intensive PAs, they felt relieved and expressed appreciation for their teachers' kindness. Such experiences resulted in diminished self-expectations and confidence in PE and PA in middle school. They avoided intensive PAs, such as ball games, preferring activities without male participation, and opted to be spectators during games. Due to increasing gender-conforming pressures, participants refrained from strenuous PAs. Huang described how gendered peer dynamics eventually discouraged her from playing her favourite sports:

I had a boyish personality and often played basketball or football with boys in primary school. But I stopped in middle school because I feared other girls would tease me for being a tomboy.

This illustrates how peer-imposed femininity restricted previously enjoyed activities and transformed girls from active participants to passive observers. Cai described how girls observed boys' games:

While boys were playing games, girls were watching, cheering, and discussing who was the manliest and most handsome player. We were annoyed when the referee was unfair to our boys' team. After the games, we comforted them, ate with them, and did their laundry.

From Gendered PE Curricula to Exclusion of Girls from PE in Basic Education

Participants consistently described HPE curricula in basic education as gender inequitable. They noted that extra-curricular PA programmes, such as football and basketball, were male-oriented or exclusively recruited boys, effectively excluding girls from participation. Jiang complained:

My middle school had exclusive basketball courts for the boys' team. They were trained to compete at the highest levels. However, girls weren't permitted to join, and such a possibility was never discussed.

Sports venues were also geared towards male students. Participants unanimously agreed that, given the limited resources two or three decades ago, schools primarily provided outdoor basketball courts. Although some schools in Beijing and Shanghai had football fields and tennis and badminton courts, they were often dominated or could only be accessed by boys. Sports venues and facilities (e.g. dance studios, swings) girls might have preferred were unavailable. Fang recalled the available sports venues:

My middle school had basketball and tennis courts, and table tennis areas. Most boys went to play basketball and tennis. The PE environment just didn't make it easy for girls to participate or choose what sports they wanted to do. (Fang, 40, Beijing)

Participants considered that gender inequality in basic education PE – characterised by gendered curricula and unequal access to sports venues and facilities – created great health risks in adulthood. They agreed that PE, though a compulsory course throughout education, failed to equip them with the knowledge and skills needed for healthy and active lifestyles. Tang explained:

I had an operation and several viral infections this year. A female doctor told me that for middle-aged women, regular exercise – not medicine – was the only way to boost immunity. It was the first time anyone said that to me. It came from my doctor, not my PE teacher. (Tang, 40, Beijing)

This demonstrates how gendered PE curricula have marginalised girls and created enduring detrimental effects on their health.

From Internalised Gender Norms to Reluctant Participation in Higher Education PE

Many participants expressed reluctance toward university PE despite improved access. Desiring less strenuous, easy-to-pass options, they favored aerobics. Tang observed that:

In university PE, I enrolled in aerobics, and competition for spots was intense. This was because most girls preferred courses less tiring and easier to pass. For aerobics, the assessment standard was low: if we performed the memorised routine, we could pass.

Although participants now had greater access to PE due to gender-segregated classes and improved facilities, most expressed considerable reluctance to participate. Wang described her college PE experiences:

Girls did aerobics and callisthenics then. We were reluctant to practice but had to because my female PE instructor was demanding. Girls were negative about aerobics lessons and complained about the teacher while practising the movements (Wang, 45, Beijing).

Most participants stated that their motivation to engage in PE was driven more by its compulsory status as a degree requirement than by personal interest or a desire to acquire athletic skills. Meng recalled her college PE experiences:

Our PE teacher required girls to obtain As in tests. If we didn't get there, we were punished with an 800-meter run after each lesson. My university drove girls to excel in PE under the Maoist 'iron ladies' ideal - being physically as strong as men. Girls genuinely disliked running, especially in Beijing's cold winter wind. (Meng, 51, Hubei)

Girls' limited interest and motivation for PE engagement resulted in male dominance across all sports clubs. Wang remembered that her university's football, basketball, and tennis courts were all dominated by boys. When asked why, she explained that boys used sports to express masculinity and release energy. Regarding girls' participation, she noted that they preferred watching boys' games, particularly skilled male players who were very popular amongst the girls. These findings indicate that the negative impact of gendered expectations in basic education PE continued into HE, further diminishing young women's PA engagement.

From gendered PE experience to constrained PA across single motherhood

Participants persistently reported that PE experiences had minimal impact on their post-divorce PA. They reflected that PE had conveyed to them the message that men are innately active and strong and hence suited for PA, while women are passive and weak, making PA seem less essential. During marriage, 26 out of 28 discontinued PA participation, whereas their husbands remained physically active. Wang noted that, with limited PA awareness, she prioritised her ex-husband's PA needs over her own. She recounted:

My ex-husband loved exercising and often showed off his muscles in front of our children. I undertook all child-care duties, feeling he needed exercise after his demanding job, and I should support him. After our second child, I quit PA completely, while he maintained his routine, making clear that fitness was his top priority.

Following divorce, participants prioritised limited after-work time for childcare over self-care, expressing a strong sense of responsibility for their children's well-being. Several participants depicted this responsibility as 'natural' or 'expected'. Man (40, Hebei) attributed her lack of PA to single motherhood and demanding work schedules, which generated inconsistent parental company for her son. Despite an aspiration to participate in PA, she preferred to spend her limited free time with her son rather than exercising.

Additionally, participants reported that Confucian gender role expectations imposed by parents created barriers to PA participation after divorce. Yang expressed guilt about leaving her daughter in her parents' care and felt resigned to family surveillance over her behaviour while exercising outside. She recalled:

When my daughter was little, if I went out to exercise, even briefly, my parents would call me whenever something happened, implying that I was enjoying life, while leaving childcare to them. They believed I should prioritize childcare, making me feel intensely guilty and reluctant to exercise.

Chen had experienced similar parental surveillance over her participation in Pilates. She complained that:

After divorce, I started practising Pilates. My father thought it was abnormal. In his view, I should live a 'normal' life — dating, entering a new relationship, and remarrying. He felt I was wasting my time and not doing anything serious. (Chen, 35, Beijing)

Meng was the only participant who had attained consistent PA autonomy by actively involving her ex-husband in childcare. She remarked on her autonomy in exercising:

My father passed away shortly after I graduated, then I married, had a son, and was divorced by 30. People say Chinese women carry three burdens: father, husband, and son. With two lifted, I can live as I please. My mother and ex-husband share childcare while I exercise to survive exhausting work. When they complain, I tell them: if I don't support the family, who will?

This indicates that to secure support from her mother and ex-husband, Meng had to describe exercise as an essential way to regain her capacity for family provision.

Although twenty participants had received medical advice about the importance of regular exercise, they failed to follow it because of poor PA awareness, childcare priorities, and time constraints. Luo recalled:

When going through divorce, I had a heart condition. I never thought it was caused by inadequate PA. I attributed it to work-related stress and the unhappy marriage. Instead of increasing PA levels after recovery, I only aimed for a quick recovery. With a young child, I couldn't afford to be ill.

Luo's experience was mirrored by Zhong (38, Wuhan), who developed depression following divorce-related stress and was prescribed antidepressants. Despite medical advice about regular exercise for recovery, she considered medication a more convenient option given her heavy workload.

In summary, participants reported low PA levels following divorce, shaped by multiple barriers such as gender expectations around single motherhood, familial surveillance, limited athletic skills, and poor health and PA awareness. Significantly, none of them identified gender inequality in PE as impacting their adult PA participation.

Discussion

Our study indicates DSMs' gendered PE experiences and later PA disengagement are perpetuated by institutional legacies embedded in China's PE system. Despite curriculum reforms, girls' marginalisation persists throughout educational stages, intersecting with post-divorce moral scrutiny. These dynamics undermine DSMs' capacity to prioritise PA in adulthood. While resonating with previous research on gendered disparities (Mayo et al., 2018), our analysis extends this work by revealing how PIA among DSMs is co-produced by institutionalised gender dynamics, socialist-era egalitarian ideals, and neoliberal self-responsibility discourse.

The following sections unfold these dynamics across three interrelated themes: (1) how gendered socialisation in PE produces passive participation, (2) how institutional legacies promote inequality across life stages, and (3) how post-socialist feminism highlights moral surveillance of DSMs' bodies in contemporary China.

Gendered socialisation and the production of passive participation in PE

Participants' reflections on PE during school years revealed how gendered socialisation inculcated an enduring sense of imposed physical inadequacy and marginalisation. Despite curriculum reforms intending to promote inclusivity, many participants, regardless of age, internalised similar messages, connecting femininity with physical passivity and fragility. These connections generated emotional distance and social discouragement from PE, as well as a long-lasting retreat from PA shaped by gendered expectations.

Participants' experiences traced normalised processes of gender socialisation, whereby individuals internalise and perform expectations through institutional routines. West and Zimmerman's (1987) 'doing gender' concept shows femininity is continually practiced through interaction, surveillance, and normative cues entrenched in educational environments. These cues manifested through teachers' gendered expectations and relaxed standards for girls' PA intensity and duration. Such cues were reinforced early and continually by peer dynamics and teachers (Leaper & Farkas, 2014), shaping perceptions of physicality as inappropriate for proactive engagement and causing progressive PE disengagement.

Participants had the strongest reflections on these cues during adolescence, when pressures perpetuating fragility and demanding gender conformation intensified. These pressures contributed not only to discomfort, feelings of inferiority, and reluctance in PE, but also to long-lasting disengagement from PA, which began with internalised low teacher expectations followed by diminished self-expectations and continued into post-divorce years. For many participants, their bodies became sites of emotional unease and social judgment, where vigorous movement or participation in male-dominant PAs risked disrupting prescribed feminine norms.

These findings align with prior research on girls' socialisation into physical passivity in PE. Our participants experienced embodied messages of bodily inadequacy revealed by Oliver and Hamzeh (2010), diminishing participation and confidence. Consistent with Kitching's (2025) study, we observed that boys' hegemony over high-status sports (e.g. basketball and football) both produced and normalised the physical and social exclusion of girls. Participants' experiences also echoed those described by Azzarito et al. (2006), who argued that adolescent girls' PE disengagement originated more from the social and structural gendering of sport spaces and capacities than a genuine lack of interest. Nevertheless, unlike Western studies that have highlighted girls' explicit resistance to traditional femininity in PE, our findings reveal a passive retreat on the part of Chinese girls. This presents a culturally specific manifestation of gender socialisation, whereby Confucian ideals encourage social harmony over individual expression and passive retreat over active resistance (Wang & Hill, 2023). These messages led to participants' silent withdraw from competitive or physically assertive PAs due to gender-conforming pressures, a pattern also noted by Pang et al. (2023). This suggests that Chinese girls may face stronger moral pressures and deeply embedded socio-cultural constraints compared with their Western counterparts, which can limit their capacity to resist dominant contemporary gender norms.

Institutional legacies and structural inequalities in PA across life stages

This study expands knowledge by examining gendered PE experiences across educational stages extending into single motherhood, whereas previous studies examining single stages (e.g. Fagrell et al., 2012). Institutionalised gendered experiences create lifelong PA disengagement, especially post-divorce. This accords with research showing early PE experiences predict long-term PA levels

(García-Hermoso et al., 2023; Ladwig et al., 2018). While Wang et al. (2021) emphasized historic exclusion and gender segregation in PE, our findings extend this by showing how such exclusion and segregation resonate across lifetime, especially for DSMs. Despite age differences, participants reported similar PE experiences highlighting persistent gender inequality and unresolved structural inequalities: curriculum bias, gendered expectations, and restricted access. These inequalities demonstrate PA is prioritised for boys, reproducing gendered assumptions about physical competence and perpetuating structural inequalities beyond education. For instance, Chinese DSMs have been found to experience salient organizational barriers to workplace PA participation shaped by unequal access to facilities and male-oriented PA programmes (Zhou et al., 2025).

This continuity becomes even more pronounced when examining how it unfolds in DSMs' lives, where institutional and cultural forces intersect to strengthen structural inequality. Our study advances current literature by adopting a life-course lens to examine DSMs – a population largely marginalised in Chinese PA research. We found that early internalised messages of bodily inadequacy and passivity developed into gendered self-surveillance during adolescence and ultimate withdrawal from adult PA. These messages also shaped participants' reluctance towards HE PE and were reinforced by Confucian gender-role expectations surrounding single motherhood. This indicates that inequality in PE is not merely reproduced through policy or curriculum, but is sustained through enduring cultural norms. We argue that gendered PE experiences are not standalone moments, but an essential part of the longer-term life-course trajectory leading to DSMs' diminished PA participation, limited health awareness, and cumulative gendered health disparities. These findings highlight how institutional legacies and cultural continuities reinforce one another, generating complicated intersecting disadvantages for DSMs, not only in PA but across lifelong health trajectories.

Post-socialist feminism and the moral surveillance of DSMs' bodies

Besides echoing previous research linking single motherhood to reduced PA levels (Dlugonski & Motl, 2013; Hoch et al., 2024), our findings reveal that DSMs' post-divorce PA was constrained by intersecting powers, including gendered expectations structured through PE, social roles assigned to DSMs, and systemic moral surveillance. These dynamics, identified in the previous section, are here analysed through post-socialist feminism. Although China's socialist-era propaganda encouraged women's public participation, Confucian ideals around family responsibility and female virtue persisted in the private sphere (Wesoky, 2015a). Accordingly, DSMs prioritised economic provision and childcare over self-care, choices conditioned by moral expectations and socialist legacies rather than personal autonomy. This burden has been reinforced by revived Confucian family values in the past decade, which moralise DSMs' identities around sacrifice and childcare, constructing PA as non-essential or incompatible with normative responsibilities. This is underlined in the patriarchal surveillance over DSMs' PA, which restricts autonomy and fosters maternal guilt, jointly undermining their perceived legitimacy in PA participation. These dynamics echo critiques of moral respectability as a form of gendered governance, whereby women's bodies are judged by normative ideals of discipline, restraint, and self-sacrifice (Barlow, 2004; Liu et al., 2016).

Meanwhile, participants' attribution of low PA levels to single motherhood, divorce, and demanding work schedules reflects neoliberal narratives of individual responsibility (Li, 2020). For DSMs, PA functions more as a self-discipline strategy to maintain emotional and labour capacity than as an inherent right, reflecting labour market expectations for healthy and efficient bodies in post-socialist China (Liu, 2024). These neoliberal narratives disguise structural inequalities in China's education system and society, more generally, that restrict DSMs' time, space, and support for PA. Limited athletic skills, lack of health knowledge, and persistent avoidance of PA – despite medical advice – demonstrate how marginalisation and exclusion from PE continue to constrain PA participation in adulthood, echoing Preece and Bullingham's (2022) findings. Our findings show that DSMs' PA participation is not simply a matter of personal disinterest fostered by gender inequality in PE. Rather, it

is influenced by moral regulation and internalised gendered role expectations within the state-market-family gender nexus. Therefore, Meng's defence of her PA participation and negotiation of Chinese women's 'three burdens' suggest that DSMs can achieve consistent PA participation only through strategic resistance to the gender regime, which requires continued navigation of autonomy, resilience, and family responsibility.

Conclusion

Through 28 in-depth interviews with Chinese DSMs, this study addressed two related questions: How do gendered expectations embedded in PE from primary school to university shape girls' PE experiences, and how do these experiences influence PA participation after divorce? It reveals that early marginalisation in PE creates trajectories of lifelong PIA structured by intersecting institutional, cultural, and gendered forces.

Three key findings

First, gendered socialization in PE operates through teacher expectations, peer surveillance, gendered curricula, and unequal resource allocation, producing passive participation and internalized messages of physical inadequacy. Despite strong interest in male-dominated sports, participants retreated from PE due to gender-conforming pressures intensified during adolescence. This pattern persisted from primary school through university, indicating systemic inequality.

Second, institutional legacies extend far beyond formal education. Participants' PE experiences shaped not only their immediate engagement but also their adult health awareness, athletic skill acquisition, and long-term PA participation. Gender inequality in PE is, thus, not merely an educational issue but a public health concern, producing cumulative health disadvantages that persist decades after graduation and intensify following divorce.

Third, DSMs' post-divorce PA participation is constrained by a state-market-family gender regime that moralises their bodies and behaviour. Despite medical advice to increase PA, participants prioritised economic provision and childcare over self-care. Choices are conditioned by revived Confucian family values, parental surveillance, maternal guilt, and neoliberal discourses of individual responsibility. Only through strategic resistance and negotiation of family obligations could consistent PA participation be achieved, underscoring how structural inequality operates through moral regulation rather than solely through resource constraints.

Theoretical contributions

As the first longitudinal study in China examining PE's enduring impact on DSMs' adult PA, this research advances scholarship in three ways. First, it situates PE as both a product and a mechanism of gender socialisation, demonstrating how early gendered experiences compound across the life course to produce health inequalities among marginalised women. Second, it extends gender socialisation theory by revealing culturally specific manifestations: whereas Western research highlights girls' explicit resistance to feminine norms in PE, Chinese participants exhibited passive retreat shaped by Confucian ideals emphasising social harmony over individual agency. Third, it contributes to localised feminist scholarship by employing post-socialist feminism to interpret how state discourse, market reforms, and Confucian moral regulation intersect to govern Chinese women's embodied subjectivities and PA participation.

Practical implications

Evidence-based recommendations emerge across multiple levels:

Policy level: HPE policymakers must develop gender-equitable curricula that explicitly recognise gender as a structuring force in PE and address systematic disadvantages faced by girls. Current reforms are presented as gender-neutral but continue to embed masculine sporting traditions and therefore fail to address systematic inequality in PE.

Institutional level: PE teacher training should integrate gender sensitivity education, focusing on recognising implicit biases, diversifying PA options, ensuring equitable resource allocation, and creating inclusive environments that support rather than marginalise girls' participation.

Social level: Enhancing DSMs' PA requires structural and cultural shifts acknowledging their 'double burden' of paid labour and unpaid care work. Public health interventions must move beyond individualistic self-care narratives to address systemic barriers, including workplace policies supporting parental leave and flexible working arrangements, affordable childcare, and community-based PA programs designed specifically for DSMs.

Limitations and future directions

This study is limited by a small, age-imbalanced sample concentrated in urban areas, which may reduce generalizability. Future research should recruit larger, age-balanced samples, enable cross-generational comparisons, and include participants from smaller cities and rural areas where PE resources and gendered expectations may differ. Additionally, given that male teachers comprise 77% of China's PE workforce (Wang et al., 2021), research examining how this gender imbalance influences contemporary Gen Z girls' experiences is urgently needed. Finally, comparative research examining DSMs' PA across post-transition Eastern Europe and market-reform socialist contexts (e.g. Cuba and Vietnam) could illuminate how state-market-family regimes shape women's health trajectories differently across cultural and political systems.

In conclusion, this study demonstrates that DSMs' PIA cannot be attributed simply to individual choices or post-divorce constraints. Rather, it results from decades of accumulated gendered disadvantage rooted in childhood PE, reinforced through institutional practices and cultural norms, and sustained by moral surveillance within post-socialist China's gender regime. Addressing this requires systemic transformation of both PE systems and social structures governing motherhood, work, and women's rights to bodily autonomy and self-care.

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References

Ahmed, S. (2013). *The cultural politics of emotion*. Routledge.

Azzarito, L., Solmon, M. A., & Harrison, L. (2006). “... If I Had a Choice, I Would” A feminist poststructuralist perspective on girls in physical education. *Research Quarterly for Exercise and Sport*, 77(2), 222–239. <https://doi.org/10.1080/02701367.2006.10599356>

Barlow, T. E. (2004). Theorising woman: Funü, guojia, jiating (Chinese woman, Chinese state, Chinese family). In T. E. Barlow (Ed.), *The question of women in Chinese feminism* (pp. 235–260). Duke University Press.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological* (Vol. 2, pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, 9(1), 3–26. <https://doi.org/10.1037/qup0000196>

Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 191–205). Routledge.

Brinkmann, S. (2022). *Qualitative interviewing: Conversational knowledge through research interviews*. Oxford University Press. <https://doi.org/10.1093/oso/9780197648186.001.0001>

Cai, Y., & Liu, B. (2015). Negotiating gender mainstreaming in China. In E. Sandler & A. Rao (Eds.), *Women and girls rising: Progress and resistance around the world* (pp. 160–174). Routledge. <https://doi.org/10.4324/9781315708379-13>

Chai, Q., Sun, S., & Zhang, Y. (2024). Gender imbalance, marriage stability, and divorce rate: Evidence from China. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.4755476>

Cowley, E. S., Watson, P. M., Foweather, L., Belton, S., Thompson, A., Thijssen, D., & Wagenmakers, A. J. M. (2021). "Girls Aren't Meant to Exercise": Perceived influences on physical activity among adolescent Girls—The HERizon Project. *Children*, 8(1), 31. <https://doi.org/10.3390/children8010031>

Cui, X., Li, L., Zhang, B., & Xu, J. (2022). Investigation of the visual health and related factors among students in Chinese sports schools. *China Sport Science*, 42(8), 66–73. <https://doi.org/10.16469/j.css.202208006>

da Silva, D. J., Barbosa, A. O., Barbosa Filho, V. C., & de Farias Júnior, J. C. (2022). Is participation in physical education classes related to physical activity and sedentary behaviour? A systematic review. *Journal of Physical Activity and Health*, 19(11), 786–808. <https://doi.org/10.1123/jpah.2022-0084>

Denzin, N. K., & Lincoln, Y. S. (2023). *The SAGE handbook of qualitative research* (6th ed.). SAGE.

Dlugonski, D., Martin, T. R., Mailey, E. L., & Pineda, E. (2017). Motives and barriers for physical activity among low-income Black single mothers. *Sex Roles*, 77(5–6), 379–392. <https://doi.org/10.1007/s11199-016-0718-7>

Dlugonski, D., & Motl, R. W. (2013). Marital status and motherhood: Implications for physical activity. *Women & Health*, 53(2), 203–215. <https://doi.org/10.1080/03630242.2013.767304>

Dlugonski, D., & Motl, R. W. (2014). Social cognitive correlates of physical activity among single mothers with young children. *Psychology of Sport and Exercise*, 15(6), 637–641. <https://doi.org/10.1016/j.psychsport.2014.07.007>

Fagrell, B., Larsson, H., & Redelius, K. (2012). The game within the game: girls' underperforming position in Physical Education. *Gender and Education*, 24(1), 101–118. <https://doi.org/10.1080/09540253.2011.582032>

Frith, H., & Gleeson, K. (2004). Clothing and embodiment: Men managing body image and appearance. *Psychology of Men & Masculinity*, 5(1), 40–48. <https://doi.org/10.1037/1524-9220.5.1.40>

García-Hermoso, A., Ezzatvar, Y., & López-Gil, J. F. (2023). Association between daily physical education attendance and meeting 24-hour movement guidelines in adolescence and adulthood. *Journal of Adolescent Health*, 73(5), 896–902. <https://doi.org/10.1016/j.jadohealth.2023.06.014>

Hoch, J. M., Dlugonski, D., Slone, S., Hogg-Graham, R., & Jones, M. (2024). Physical inactivity among American single-female caregivers: An analysis of the 2020 behavioral risk factor surveillance system. *Women's Health*, 20, 1–8. <https://doi.org/10.1177/17455057241265082>

Hu, F., & Yuan, J. (2015). Research of adolescents' sport participation from the perspective of gender socialization. *Sport Culture Guide*, 8(8), 203–206.

İşikgöz, M. E., Şahbudak, M., Deveci, M. E., & Öztunç, M. (2025). Challenges and successes in promoting gender equality through physical education and sports: A systematic review. *BMC Public Health*, 25, 2117. <https://doi.org/10.1186/s12889-025-23373-0>

Kirk, D. (2002). Physical education: A gendered history. In D. Penney (Ed.), *Gender and physical education: contemporary issues and future directions* (pp. 36–50). Routledge.

Kitching, N. (2025). 'What do you love about sport?' Exploring boys' and girls' embodied experiences of sport. *Sport, Education and Society*, 30(8), 955–967. <https://doi.org/10.1080/13573322.2024.2375294>

Kollmayer, M., Schober, B., & Spiel, C. (2018). Gender stereotypes in education: Development, consequences, and interventions. *European Journal of Developmental Psychology*, 15(4), 361–377. <https://doi.org/10.1080/17405629.2016.1193483>

Ladwig, M. A., Vazou, S., & Ekkekakis, P. (2018). "My best memory is when I was done with it": PE memories are associated with adult sedentary behavior. *Translational Journal of the American College of Sports Medicine*, 3(16), 119–129. <https://doi.org/10.1249/TJX.0000000000000067>

Leaper, C., & Farkas, T. (2014). The socialization of gender during childhood and adolescence. In J. Grusec & P. D. Hastings (Eds.), *Handbook of socialization: Theory and research* (pp. 541–565). The Guilford Press.

Li, Q. (2020). Mothers left without a man: Poverty and single parenthood in China. *Social Inclusion*, 8(2), 114–122. <https://doi.org/10.17645/si.v8i2.2678>

Li, X. (2020). *Surviving in between Neoliberalism and socialism with Chinese characteristics: Chinese women in negotiation with the nation and public culture*. Ohio University.

Lim, H., Jung, E., Jodoin, K., Du, X., Airton, L., & Lee, E.-Y. (2021). Operationalization of intersectionality in physical activity and sport research: A systematic scoping review. *SSM - Population Health*, 14, 100808. <https://doi.org/10.1016/j.ssmph.2021.100808>

Liu, B. (2024). Age discrimination in Chinese internet workplace. *Journal of Education, Humanities and Social Sciences*, 27, 172–180. <https://doi.org/10.54097/j7a9nx66>

Liu, B., Li, L., & Yang, C. (2016). Gender (in)equality and China's economic transition. In Q. Wang, M. Dongchao, & B.E. Sørensen (Eds.), *Revisiting gender inequality: Perspectives from the People's Republic of China* (pp. 21–57). Palgrave Macmillan. https://doi.org/10.1057/9781137550804_2

Liu, C., Dong, C., Li, X., Huang, H., & Wang, Q. (2023). Analysis of physical education classroom teaching after implementation of the Chinese health physical education curriculum model: A video-based assessment. *Behavioral Sciences*, 13(3), 251. <https://doi.org/10.3390/bs13030251>

Mayo, X., del Villar, F., Iglesias-Soler, E., Liguori, G., Mann, S., & Jimenez, A. (2018). A retrospective analysis of policy development on compliance with World Health Organization's physical activity recommendations between 2002 and 2005 in European Union adults: Closing the gap between research and policy. *BMC Public Health*, 18(1081), 1–11. <https://doi.org/10.1186/s12889-018-5986-4>

MoCAoC. (2023). *The 2023 statistical bulletin on the development of civil affairs* (2023). Retrieved August 29, 2025, from <https://www.mca.gov.cn/n156/n2679/c1662004999980001204/attr/355717.pdf>

Mohanty, C. T. (2003). *Feminism without borders: Decolonizing theory, practicing solidarity*. Duke University Press. <https://doi.org/10.1515/9780822384649>

Oliver, K. L., & Hamzeh, M. (2010). The boys won't let us play: Fifth-grade Mestizas challenge physical activity discourse at school. *Research Quarterly for Exercise and Sport*, 81(1), 38–51. <https://doi.org/10.1080/02701367.2010.10599626>

Oliver, K. L., & Kirk, D. (2015). *Girls, gender and physical education: An activist approach*. Routledge. <https://doi.org/10.4324/9781315796239>

Pang, B., Francombe-Webb, J., Clift, B. C., & Rich, E. (2023). The influence of gender identities and development on sports and physical education in China. In H. Fan & L. Liu (Eds.), *Routledge handbook of sport in China* (pp. 177–184). Routledge.

Pino Gavidia, L. A., MacDermid, J. C., Brunton, L., & Doralp, S. (2023). A qualitative study of healthy eating, physical activity, and mental health among single mothers in Canada. *PLOS One*, 18(11), e0294552. <https://doi.org/10.1371/journal.pone.0294552>

Preece, S., & Bullingham, R. (2022). Gender stereotypes: The impact upon perceived roles and practice of in-service teachers in physical education. *Sport, Education and Society*, 27(3), 259–271. <https://doi.org/10.1080/13573322.2020.1848813>

Ransdell, L. B., Vener, J. M., & Sell, K. (2004). International perspectives: The influence of gender on lifetime physical activity participation. *Journal of the Royal Society for the Promotion of Health*, 124(1), 12–14. <https://doi.org/10.1177/146642400312400105>

Ridgeway, C. L., & Correll, S. J. (2004). Unpacking the gender system: A theoretical perspective on gender beliefs and social relations. *Gender & Society*, 18(4), 510–531. <https://doi.org/10.1177/0891243204265269>

Rofel, L. (2007). *Desiring China: Experiments in neoliberalism, sexuality, and public culture*. Duke University Press. <https://doi.org/10.2307/j.ctv11cw96m>

Ruiz-Montero, P. J., Chiva-Bartoll, O., Baena-Extremera, A., & Hortigüela-Alcalá, D. (2020). Gender, physical self-perception and overall physical fitness in secondary school students: A multiple mediation model. *International Journal of Environmental Research and Public Health*, 17(18), 6871. <https://doi.org/10.3390/ijerph17186871>

Salmons, J. (2014). *Qualitative online interview: Strategies, designs, and skills* (2nd). Sage Publications Ltd. <https://doi.org/10.4135/9781071878880>

SSBoC. (2021). *The seventh national census*. Retrieved July 7, 2025, from https://stats.gov.cn/zt_18555/zdtjgz/zgrkpc/dqcrkpc/

Talbot, M. (1993). A gendered physical education: Equality and sexism. In J. Evans (Ed.), *Equality, education, and physical education* (pp. 74–89). Routledge. <https://doi.org/10.4324/9781315399867>

Uddin, R., Salmon, J., Islam, S. M. S., & Khan, A. (2020). Physical education class participation is associated with physical activity among adolescents in 65 countries. *Scientific Reports*, 10(1), Article 22128. <https://doi.org/10.1038/s41598-020-79100-9>

Wang, H., & Hill, M. G. (2023). *The rise of modern Chinese thought*. Harvard University Press. <https://doi.org/10.4159/9780674293021>

Wang, J., Liu, M., Wang, T., Wang, Y., & Zhou, S. (2021). Gender equality and opportunities in physical education and sport for women in China. In D. D'Amico, M. K. Jahromi, & M. L. Guinto (Eds.), *Women and sport in Asia* (pp. 35–46). Routledge.

Wang, Z. (2016). *Finding women in the state: A socialist feminist revolution in the People's Republic of China, 1949–1964*. University of California Press. <https://doi.org/10.1525/california/9780520292284.001.0001>

Wesoky, S. (2002). *Chinese feminism faces globalization*. Routledge. <https://doi.org/10.4324/9780203951842>

Wesoky, S. (2015). Bringing the *Jiaback* into *Guojia*: Engendering Chinese intellectual politics. *Signs: Journal of Women in Culture and Society*, 40(3), 647–666. <https://doi.org/10.1086/679524>

West, C. & Zimmerman, D. H. (1987). Doing gender. *Gender and Society*, 1(2), 125–151. <https://doi.org/10.1177/0891243287001002002>

WHO. (2024). *Nearly 1.8 billion adults at risk of disease from not doing enough physical activity*. Retrieved August 29, 2025, from <http://who.int/news/item/26-06-2024-nearly-1.8-billion-adults-at-risk-of-disease-from-not-doing-enough-physical-activity>

Yang, J., Qiu, C., Landi, D., & Kirk, D. (2025). Physical education and health curriculum reform in China: Empowering physical educators through professional learning. *Sport, Education and Society*, 1–15. <https://doi.org/10.1080/13573322.2025.2505029>

Zhang, B., Zhai, F. Y., Du, S. F., & Popkin, B. M. (2014). The China health and nutrition survey, 1989–2011. *Obesity Reviews*, 15(S1), 2–7. <https://doi.org/10.1111/obr.12119>

Zhang, C. (2020). Are children from divorced single-parent families disadvantaged? New evidence from the China family panel studies. *Chinese Sociological Review*, 52(1), 84–114. <https://doi.org/10.1080/21620555.2019.1654366>

Zhang, R., Xu, J., Zhang, B., Li, F., Guo, T., & Li, L. (2025). The relationship between physical exercise, myopia prevention, and physical development in children: A one-year longitudinal intervention study. *China Sport Science*, 45(1), 29–37. <https://doi.org/10.16469/j.css.2025KX005>

Zhang, T., & Tang, J. (2016). A review and reflection on the direction of physical education curriculum reform in China's basic education since the founding of the People's Republic of China. *Journal of Wuhan Institute of Physical Education*, 50(10), 96–100. <https://doi.org/10.15930/j.cnki.wtxb.2016.10.016>

Zheng, J. (2016). Chinese women and feminism. *New feminism in China: Young middle-class Chinese women in Shanghai* (pp. 1–22). Springer. https://doi.org/10.1007/978-981-10-0777-4_1

Zhou, C., Bairner, A., & Molnár, G. (2025). Organizational and personal barriers to physical activity: An intersectional analysis of divorced single mothers in China's IT and Internet industries. *Sport, Education and Society*, 30(9), 1196–1209. <https://doi.org/10.1080/13573322.2025.2555345>

Zurndorfer, H. (2018). Escape from the country: the gender politics of Chinese women in pursuit of transnational romance. *Gender, Place & Culture*, 25(4), 489–506. <https://doi.org/10.1080/0966369X.2018.1453488>