

Review Paper

A Systematic Review of Factors Influencing Women's Sports Participation

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Abstract: With the continuous rise in global chronic diseases, public health issues have attracted more attention. Women's health is particularly prominent in this regard. The World Health Organization (WHO) emphasizes that "regular engagement in physical exercise is fundamental to health maintenance." However, recent research indicates that approximately one-third of women worldwide fail to meet the physical activity levels recommended by health experts. This situation has made women mass sports participation an important topic in academic research. According to the Theory of Planned Behavior (TPB), individual behavior is directly influenced by behavioral intention. Behavioral intention is shaped by several interrelated factors. Using this theoretical framework, this study employs a systematic review to identify factors influencing women's intentions to participate in mass sports and align them within the TPB model. This provides a theoretical basis for promoting female engagement in sports. Based on a qualitative analysis of the 30 included studies, this research identifies four categories of factors influencing women's intention to participate in mass sports: attitude toward sports participation, subjective norms, perceived behavioral control, and other relevant factors. Among these, perceived behavioral control demonstrates the most significant association with women's intention to engage in mass sports. To advance this field, future research should use theory-driven longitudinal designs to improve the accuracy of participation predictions. Mixed-methods approaches are also recommended to gain a deeper understanding of women's experiences and their subjective views on influencing factors.

Keywords: Women's sports; mass sports; sports participation; influencing factors; TPB

Introduction

Technological advances have transformed lifestyles while posing serious global health challenges. Reports over 1.4 billion adults worldwide are physically inactive, significantly increasing risks of cardiovascular diseases, diabetes, dementia, and cancers (WHO, 2024). In response, governments have implemented sports promotion policies such as China's "National Fitness," Japan's "Sports Promotion Plan," and North American initiatives confirming mass sports' vital role in public health (WHO, 2018). Recent data show one-third of women globally fail to meet physical activity guidelines, with mass sports participation rates demonstrating significant gender disparities (SPRINTER, 2023). To address this, United Nations Educational, Scientific and Cultural Organization established the Global Observatory for Women in Sports, targeting systemic inequalities (UNESCO, 2021).

The Women's Sports Foundation, in its research report on sports equity, has called upon the academic community to conduct in-depth investigations into the factors influencing women's participation in sports, to eliminate barriers to engagement in community sports (Foundation, 2020). Although behavioural theories

have been widely applied in various health behaviour studies, there remains a lack of theoretically guided research specifically focused on women's mass sports participation. To address this gap, this study innovatively applies the Theory of Planned Behaviour (Ajzen, 1991) to the study of women's mass sports participation. By establishing a scientific, theoretical, and analytical framework, it systematically explores the key factors influencing women's intention to engage in sports, thereby providing a new theoretical perspective for understanding the underlying mechanisms of their participation behaviour.

To increase women's participation rate in mass sports, thereby promote their health, and provide evidence-based guidance for the development of women's mass sports, this review establishes the following objectives: 1) Collect and synthesize research findings from a broad sample of relevant literature to investigate the factors influencing women's intention to participate in mass sports; 2) Categorize each influencing factor as a component of the theory of planned behavior to provide a theoretical framework for subsequent studies regarding women's engagement in mass sports; 3) To propose targeted, evidence-based recommendations for promoting women's mass sports, derived from the analytical findings.

Methodology

This systematic review adheres to the PROSPERO registration protocol (CRD42025116541) and employs a qualitative research method, utilizing the PRISMA framework for literature screening. PRISMA, proposed by Moher et al. (Moher et al., 2009), provides a structured reporting framework (including a 27-item checklist and flow diagram) to standardize the literature screening process, thereby enhancing the rigor, transparency, and reproducibility of research. Compared to traditional narrative reviews, PRISMA requires the explicit formulation of search strategies and inclusion/exclusion criteria, effectively avoiding selection bias. Its reliability is underscored by its designation as a mandatory reporting standard by the Cochrane Collaboration and its endorsement by leading academic journals such as JAMA and Nature.

1. Search Strategy

To ensure the comprehensiveness and rigor of this literature review, multiple academic databases and gray literature resources were systematically searched on April 1, 2025. The databases searched included: Web of Science (WoS), Scopus, PubMed, SPORTDiscus, PsycINFO, and Embase. Additionally, to maximize coverage of relevant unpublished research, the study supplemented the search with gray literature, primarily involving thesis databases in related fields and publicly available reports and conference proceedings issued by major academic institutions (such as the World Health Organization and the International Olympic Committee).

2. Eligibility Criteria

This study strictly adhered to the following inclusion and exclusion criteria for literature screening: Inclusion criteria comprised: (1) peer-reviewed original research articles; (2) studies focusing on factors influencing women's participation in sports; (3) publication dates limited to January 2005 through April 2025; (4) English-language publications only. Concurrently, the following study types were excluded: (1) non-original research (e.g., reviews, commentaries); (2) publications prior to 2005; (3) studies involving specific populations (e.g., pregnant women, individuals with disabilities, those with intellectual disabilities); (4) mixed-gender studies lacking gender-stratified analysis. These criteria ensure the quality, timeliness, and homogeneity of the research subjects, while guaranteeing the availability of female-specific data.

3. Screening

The literature screening process was conducted independently by two researchers. Specifically, we followed the method proposed by Cohen (Cohen, 1990), utilizing the Rayyan online system for blind screening and conflict resolution. Inter-rater agreement was measured using the Kappa statistic, yielding a value greater than 0.6, indicating good agreement. For documents initially judged inconsistently, consensus was reached through mutual discussion. The search strategy employed in this study aimed to systematically screen the literature on factors influencing women's participation in sports. Specific search criteria required that abstracts contain the

following keyword combinations: (Physical activity OR Physical exercise OR Mass sport OR Sport) AND ((Female OR Gender OR Girl OR Women) AND (Influence OR Impact OR Barrier OR Facilitator)).

A preliminary keyword search of the database yielded 411 records. After removing duplicates, non-English language articles, those outside the specified timeframe, and non-original works, 255 records remained. Records that did not target female populations or were irrelevant to the review objectives were excluded. After these exclusions, 68 records remained. From this pool, articles focusing solely on specific female populations (e.g., women with intellectual disabilities, women with physical disabilities, pregnant women) and those lacking clear gender stratification were removed. Ultimately, this systematic review included 30 records addressing factors influencing women's participation in sports. Figure 1 presents a flow diagram based on the PRISMA Group's recommendations for systematic review reporting, illustrating the process of record selection.

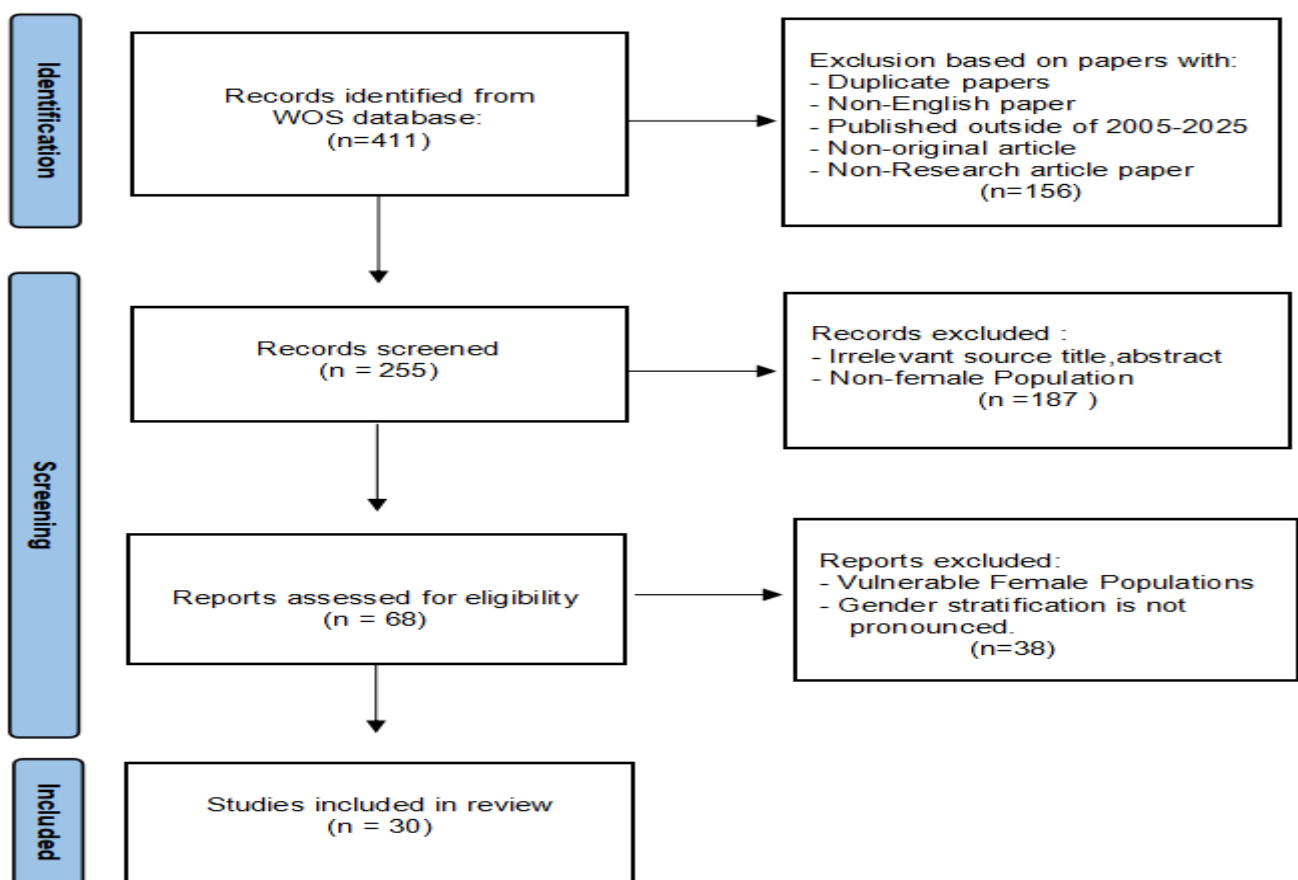


Figure 1. PRISMA flow diagram depicting the study selection procedure.

4. Quality Appraisal

This study rigorously employed the JBI Key Assessment Tool to evaluate the methodological quality of all included literature. To ensure objectivity and minimize bias, the assessment process was carried out independently by two reviewers (Cheng and Hafizah). The evaluations were conducted using specific checklists tailored to each study design: the JBI Cross-Sectional Study Assessment Checklist, comprising 8 critical items, was applied to cross-sectional studies, whereas the JBI Qualitative Study Assessment Checklist, consisting of 10 items, was utilized for qualitative studies. Any discrepancies or disagreements in the initial assessments between the two reviewers were carefully examined and subsequently resolved through in-depth discussion until a full consensus was reached. Table 1 presents the specific results for each individual study included in this review.

The Findings

1. Description of Literature Characteristics

The 30 studies reviewed employed a variety of research designs. Specifically, the corpus comprised small-scale cross-sectional surveys as well as secondary analyses of large-scale datasets. Methodologically, the studies adopted qualitative, quantitative, and mixed-methods approaches, reflecting the heterogeneity of investigative techniques in this field. Temporally, the publications spanned 20 years from 2005 to 2025, with the peak publication frequency occurring in 2012, representing 15% of the total included studies. Geographically, the studies demonstrated a broad international distribution, with empirical contributions originating from multiple world regions, involving multiple countries and regions, including Europe, North America, Australia, China, Nigeria, Iran, Saudi Arabia, and others.

From the perspective of research fields, existing studies demonstrate a clear disciplinary bias, with sociology dominating the research landscape, accounting for 87% of the articles (26 articles). At the same time, psychology remains underrepresented, comprising 10% of the articles (3 articles). Given that women's participation in sports is a complex, multidimensional phenomenon influenced by both individual psychological factors and social structural factors, this study adopts an integrated social psychological research perspective. By integrating psychological micro-analysis with sociological macro-examination, a more systematic analytical framework is constructed to comprehensively reveal the multi-layered mechanisms influencing women's participation in sports.

In terms of theoretical application, the analysis revealed that only 13.3% of the literature (4 studies) employed theoretical frameworks to guide their research, with three studies applying the Leisure Constraints Theory and 1 study utilizing the self-determination theory. Existing evidence suggests that the use of theoretical frameworks is of great value in revealing the underlying mechanisms of health behaviors and developing targeted intervention strategies. To address this research gap, this study innovatively introduces the Theory of Planned Behavior to construct a scientific theoretical analysis model, aiming to systematically analyze the key influencing factors of women's intention to participate in mass sports, thereby providing new theoretical explanations for understanding the underlying mechanisms of this behavior. Table 1 provides a descriptive comparison of the characteristics of each study.

The methodological quality assessment of the 30 included studies indicates that all of them met over 70% of the criteria on their respective JBI critical appraisal tools. This outcome demonstrates that the overall methodological rigor of the selected literature is satisfactory. Meeting this threshold signifies that the core design, conduct, and reporting of these studies adhere to accepted scientific standards, thereby mitigating significant methodological biases. This finding suggests that, although high-quality empirical studies focusing specifically on the factors influencing women's participation in mass sports remain relatively scarce, the body of evidence synthesized in this review is methodologically acceptable and provides a solid foundation for subsequent analysis. Consequently, within the scope of currently available literature, it can be asserted that the findings of this review provide a credible evidence base for understanding this issue.

Table 1 Description of study characteristics

No	First Author	Year	Topic/Title	Study Design	N	Country / Region	Discipline	Theory	Assessment
1	Titze, Sylvia	2005	Prospective study of individual, social, and environmental predictors of physical activity: women's leisure running	Quantitative Longitudinal	500	Austria	Psychology	None	7/8
2	Jeroen Scheerder	2006	Sports Participation Among Female From Adolescence to Adulthood	Quantitative Longitudinal	257	Belgium	Sociology	None	7/8
3	Maya Skowron	2008	Determinants of Leisure Time Physical Activity Participation Among Latina Women	Quantitative Cross-sectional	269	America	Sociology	None	6/8

4	Cindy H.P	2008	Motives for and barriers to physical activity participation in middle-aged	Quantitative Cross-sectional	360	China	Psychology	None	7/8
5	Melinda Craike	2009	Why do young women drop out off sport and physical activity? A social ecological approach	Qualitative	62	Australia	Sociology	Self-Determinati on Theory (SDT)	6/8
6	Dixon	2009	From Their Perspective: A Qualitative Examination of Physical Activity and Sport Programming for Working Mothers	Qualitative	44	America	Sociology	None	8/10
7	Melinda J. Craike	2011	A comparative study of factors influencing participation in sport and physical activity for metropolitan and rural female adolescents	Qualitative	123	Australia	Sociology	None	8/10
8	Sheryl Clark	2012	Being 'Good at Sport':Talent, Ability and Young Women's Sporting Participation	Qualitative Longitudinal	6	England	Sociology	None	7/10
9	Sara Keshkar	2012	Examining the Hierarchical Model of Leisure Constraints Among Women in Tehran Regarding Sports Participation	Quantitative Cross-sectional	1200	Iran	Sociology	Leisure Constraints Theory	6/8
10	Geoff Harkness	2012	Out of Bounds: Cultural Barriers to Female Sports Participation in Qatar	Qualitative	30	Qatar	Sociology	None	8/10
11	Siroos Ahmadi	2012	A Study of Women's Attitude towards Sport Participation and its Effective Socio-Psychological Factors	Quantitative Cross-sectional	336	Iran	Sociology	None	7/8
12	Gorgan Branch	2012	Analysis of Motivation for Participation in Sport for All	Quantitative Cross-sectional	350	Iran	Sociology	None	6/8
13	Emeka Anaza	2013	An Investigation of Constraints Restricting Urban Nigerian Women from Participating in Recreational Sport Activities	Qualitative	19	Nigeria	Sociology	Leisure Constraints Theory	9/10
14	Thibault	2013	Women in Sport Policy	Qualitative		Canada	Sociology	None	8/10
15	Anne Standiford	2013	The Secret Struggle of the Active Girl: A Qualitative Synthesis of Interpersonal Factors That Influence Physical Activity in Adolescent Girls	Qualitative	20	America England Canada	Psychology	None	7/10
16	Susan Dun	2016	Role Models in the Media and Women's Sport Participation in Qatar	Qualitative	233	Qatar	Sociology	None	8/10
17	Rizwan Laar	2017	Constraints to women's participation in sports: a study of participation of Pakistani female students in physical activities	Quantitative Cross-sectional	800	Pakistan	Sociology	None	7/8
18	Norm O'Reilly	2018	Lifelong Female Engagement in Sport : A Framework for Advancing Girls' and Women's Participation	Qualitative	657	Canada	Sociology	None	7/10
19	Stephanie T West	2019	Promoting Team Sport Participation among Older Women	Qualitative	64	America	Sociology	None	8/10

20	Hsiu-Chin Huang	2019	The Effects of Locus of Control, Agents of Socialization and Sport Socialization Situations on the Sports Participation of Women in Taiwan	Quantitative Cross-sectional	402	China	Sociology	None	7/8
21	Women Sports Foundation.org	2020	Keeping Girls in the Game: Factors that Influence Sport Participation	Quantitative Longitudinal	3041	Europe North America	Sociology	None	6/8
22	Jennifer R. Pharr	2020	Socio-demographic Determinants of Physical Activity and Sport Participation among Women in the United States	Quantitative Cross-sectional	1649 48	America	Sociology	None	6/8
23	Kyle Rich	2022	Participant-Centered sport development: A case study using the leisure constraints of women in regional communities	Qualitative	30	Europe North America	Sociology	Leisure Constraints Theory	8/10
24	Kyle A. Rich	2022	Mapping Women's Community Sport Participation to Inform Sport Development Initiatives: A Case Study of Row Ontario	spatial analysis	575	Canada	Sociology	None	6/8
25	Ni Rongjing	2023	A study on the factors of barriers to female university students' sports participation from an environmental perspective	Quantitative Cross-sectional	1892	China	Sociology	None	7/8
26	Marcus Kilpatrick	2023	Motivation for physical activity: Differentiating motives for sport and exercise participation	Quantitative Cross-sectional	233	America	Psychology	None	6/8
27	Balram	2024	Indo-Fijian Women and Girls' Sporting Experiences: Disrupting Cultural	Qualitative	4	Fiji	Sociology	None	8/10
28	Intisar Hamad Ismael.org	2024	Development of a Model for the Promotion of Women's Sports in Iraq	Qualitative	15	Iraq	Sociology	None	9/10
29	Tuba Boz	2025	'Chipping' away at barriers: trust as an antecedent to sport participation among Muslim women and girls in Melbourne	Qualitative	26	Australia	Sociology	None	8/10
30	Osama Abdelhay	2025	Perceived barriers to physical activity and their predictors among adults in the Central Region in Saudi Arabia: Gender differences and cultural aspects	Quantitative Cross-sectional	7903	Saudi Arabia	Sociology	None	6/8

2. Description of The Theoretical Framework of Factors Influencing Women's Participation in Sports

This study aims to systematically integrate the identified influencing factors into the conceptual framework of the Theory of Planned Behaviour, which is the second core research objective of this review. This study systematically examines the key factors influencing women's intention to participate in mass sports. Through a comprehensive literature review, we identified 39 variables related to female participation in sports. The analysis results indicate that, among the 39 influencing factors identified in this paper, 27 variables can be incorporated into the explanatory framework of the Theory of Planned Behaviour. Some variables, although not directly related to these constructs, indirectly influence behaviors by affecting attitudes, subjective norms, or perceived behavioral control. These were classified as other factors within the framework. As a result, factors influencing women's participation in mass sports were classified into four categories: attitudes, subjective norms, perceived behavioral control, and other factors.

Figure 2 shows this classification within the TPB framework.

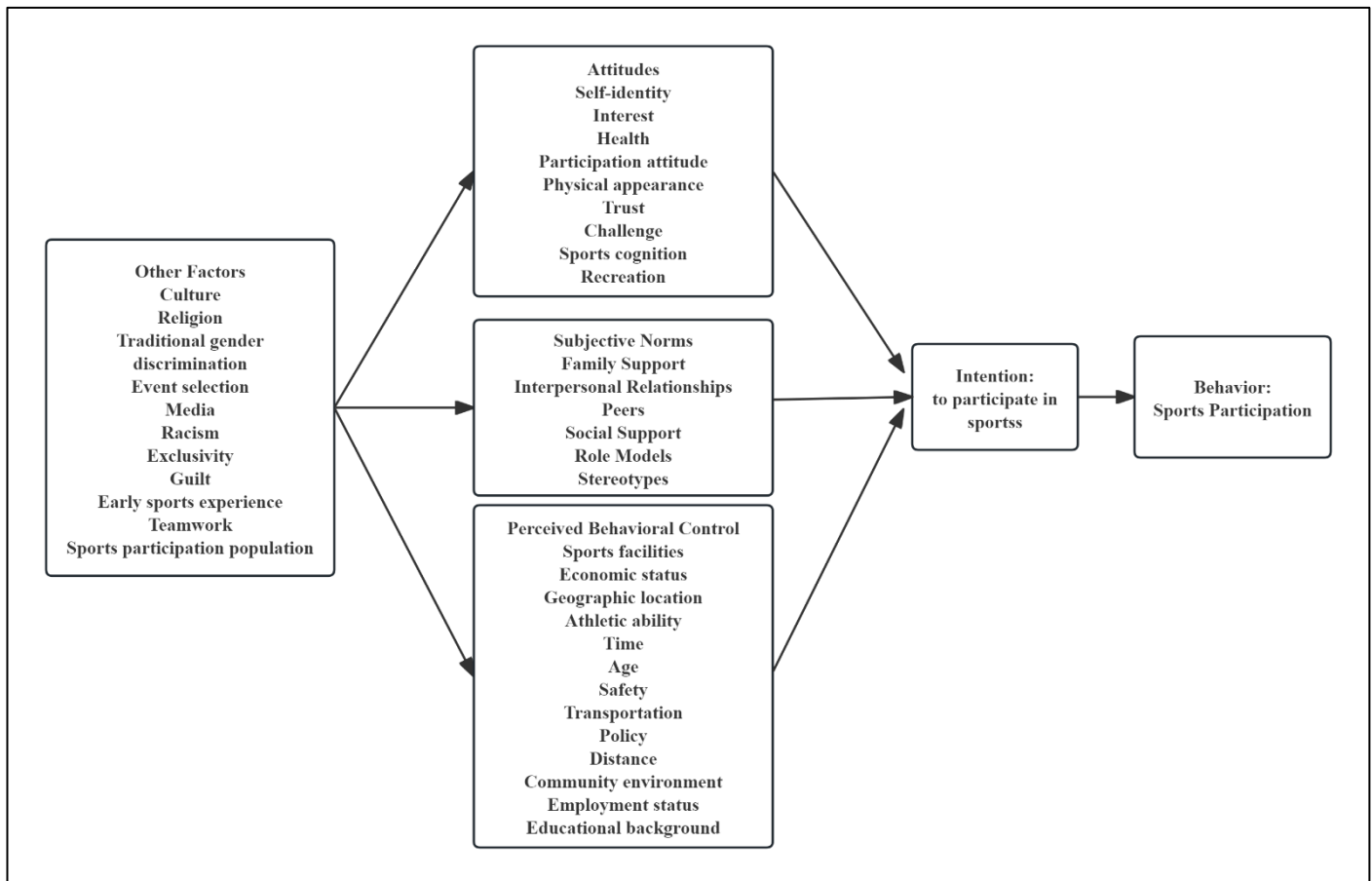


Figure 2. Theoretical model of factors influencing female sports participation

3. Description Of Influencing Factors

As shown in Table 2, the research results show that perceived behavioral control factors have the most significant influence on women's intention to participate in mass sports. This is primarily manifested in two aspects. At the socioeconomic resource level, material condition accessibility (such as access to sports facilities and economic affordability) and institutional support (including policy guarantees and community resources) exert a significant influence through the "environment-behavior" interaction pathway (Sallis et al., 2015). At the individual level, economic status has a direct influence on self-efficacy in physical activity, time management ability, and physiological and psychological well-being. Age exerts its effects through a "cognitive-behavioral" moderation pathway (Bandura, 2004).

Subjective norms are the second most significant factor influencing women's intention to participate in mass sports. Specifically, family support, especially the role modeling of mothers, can significantly increase girls' participation rates in sports (Pugliese & Tinsley, 2007), while peer influence significantly increases participation intentions through group normative pressure (Bruner et al., 2023). Additionally, interpersonal networks and social support systems formed in sports settings (such as women's sports clubs) can effectively reduce dropout rates by fulfilling individuals' need for belongingness and significantly enhancing their intrinsic motivation (Ryan & Deci, 2000). Extensive research confirms that social support and positive peer relationships are key factors in sustaining long-term participation in physical activities among women (Eime et al., 2013).

Furthermore, this study found that, beyond the factors previously discussed, an individual's attitude toward sports participation and other variables also significantly influences women's intention to engage in public sports. This influence is primarily mediated through the complex interplay between self-perception and the individual's broader cultural background. Specifically, a positive self-perception, which encompasses body image and perceived competence, can substantially enhance a woman's confidence and motivation to

participate in public sporting activities (Locke, 1997), whereas socio-cultural prescriptions regarding gender roles and the ideal body can be internalized as psychological barriers (Fredrickson & Roberts, 1997). Together, these factors profoundly shape participation intention, operating through both intrinsic motivation and extrinsic situational dimensions.

Table 2 Influence factors of female sport participation by data source.

Constructs / Number of Mentions	Variables	Data Source (Study Number Reported in Table 1)	Frequency
Perceived Behavioral Control (58)	Sports facilities	1, 5, 9, 13, 15, 17, 19, 23, 25, 30	10
	Economic status	3, 9, 13, 17, 18, 19, 22, 26	8
	Geographic location	3, 9, 13, 15, 23, 25, 24	7
	Sport ability	1, 4, 7, 9, 15, 19	6
	Time	6, 9, 13, 18, 19, 26	6
	Community environment	1, 3, 20, 23, 24	5
	Safety	13, 15, 21, 25	4
	Age	13, 19, 22	3
	Transportation	9, 15, 24	3
	Policy	14, 28	2
	Distance	23, 24	2
	Employment status	22	1
	Educational background	24	1
	Self-identity	5, 8, 9, 12, 13, 19, 23	7
	Interest	1, 4, 9, 12, 13, 18, 19	7
	Health	4, 12, 15, 26, 28	5
Attitude (34)	Participation attitude	8, 9, 11, 12, 13	5
	Physical appearance	4, 15, 16	3
	Trust	11, 29	2
	Challenge	12, 26	2
	Sports cognition	9, 19	2
	Recreation	12	1
	Family Support	9, 12, 13, 15, 17, 19, 29	7
	Interpersonal Relationships	4, 9, 12, 13, 15, 19, 28	7
	Peers	4, 9, 13, 15, 19, 28	6
	Social Support	1, 3, 5, 20, 21	5
Subjective Norms (32)	Role Models	3, 16, 18, 28	4
	Stereotypes	10, 17, 27	3
	Culture	3, 10, 13, 17, 21, 27, 30	7
	Religion	10, 17, 22, 27, 30	5
	Traditional gender discrimination	10, 22, 27	3
	Event selection	6, 23	2
	Media	17, 18	2
	Racism	22, 27	2
	Exclusivity	27	1
	Guilt	6	1
Other Factors (21)	Early sports experience	2	1
	Teamwork	12	1
	Sports participation population	24	1

Discussion

This study systematically reviewed and integrated 30 studies to identify a multidimensional factor system influencing women's intention to participate in mass sports. Based on the theoretical framework of the Theory of Planned Behavior, the study found that women's intention to participate in mass sports is primarily influenced by attitudes, subjective norms, perceived behavioral control, and other factors. This theoretical integration not only systematically reveals the influencing mechanisms of women's participation in sports but also provides a scientific theoretical analysis framework for subsequent related studies.

1. Attitudinal Factors

Women's attitudes toward mass sports form a multidimensional dynamic system. Within this system, nine variables—self-identity, interest, health, participation attitude, appearance, trust, challenge, sports awareness, and recreation—interact through a complex network to shape participation intention. From a direct influence perspective, self-identity functions as the primary driving factor. Strong self-identity transforms transient “sports behavior” into a consistent “sports identity,” cultivating persistent motivation for participation. According to Role Identity Theory, when a behavior is central to an individual's self-concept, they are more likely to persist in it despite constraints. In this context, women with a strong self-identity related to physical activity are significantly more likely to prioritize sports participation when faced with time limitations compared to their peers (Stryker & Burke, 2000). Interest is equally pivotal, shaping initial engagement decisions, while health-related motivations underpin sustained involvement (Sallis & Hovell, 1990).

Notably, body image perception exerts a dual influence on women's sports engagement: it can incentivize participation through body-sculpting objectives, yet simultaneously inhibit it due to associated self-presentation concerns (Krane et al., 2001). These factors engage in dynamic interplay, forming distinct behavioral pathways. For instance, participation driven by interest reinforces self-identity through recreational fulfillment, creating a positive feedback cycle (Mannell & Kleiber, 2020). Meanwhile, an individual's challenge propensity and sports knowledge act synergistically to enhance the achievement of health objectives. Critically, these internal processes are moderated by external conditions; a low-trust environment can substantially suppress the expression of challenge propensity, thereby hindering sustained participation (Frazier et al., 2017).

2. Subjective Norms

Women's subjective norms in mass sports are collectively formed by six interacting variables: family support, interpersonal relationships, peer influence, social support, role models, and stereotypes. Notably, family support provides essential social capital, with maternal influence being a key determinant that boosts participation intentions while buffering against economic and gender-stereotypical barriers (Fredricks & Eccles, 2005). The quality of interpersonal relationships influences sustained participation through social connections in sports settings; stable sports partners can reduce dropout rates and synergize with role model effects (Klein, 2019). Peer influence is particularly pronounced during adolescence (Steinberg & Monahan, 2007). The values of one's peer group significantly increase the likelihood of sports participation (Macdonald-Wallis et al., 2012) and can effectively counter prevailing gender biases through positive group pressure (Slater & Tiggemann, 2011).

Social support, as a structural safeguard, significantly boosts participation rates across all socioeconomic groups through public sports services and policy support, particularly mitigating the negative impacts of economic disparity (Sallis, Bull, et al., 2016). Role model demonstrations operate through a “visibility” mechanism, with increased portrayals of women in sports in media simultaneously enhancing participation intentions and reducing stereotypes (Daniels, 2012). Deep-rooted gender stereotypes significantly contribute to premature sports dropout among women. This trend can be effectively mitigated by strong family support and positive media representation (Fredricks & Eccles, 2005). These factors interact dynamically, with family support and peer acceptance forming a virtuous cycle, while stereotypes trigger a vicious cycle of sports withdrawal. This underscores the need for a multi-level support network spanning families, communities, media, and policies.

3. Perceived Behavioral Control

Perceived behavioral control in women sports participation comprises 13 variables that can be systematically explained from a social ecology perspective, based on three key dimensions: resource availability, personal ability, and social environment. There is a dynamic network of interactions within and between these dimensions.

At the level of resource accessibility, material conditions constrain women's intention to participate in mass sports. Specifically, the spatial accessibility of sports facilities is the most direct influencing factor. Empirical research suggests that the proximity of parks or sports facilities to one's home can significantly increase the rate of regular physical activity participation among women (Sallis, Cerin, et al., 2016). This spatial effect is also significantly moderated by economic conditions, exhibiting differentiated impact patterns across different income groups. Geographical location and transportation conditions influencing intention to participate in mass sports through the mechanism of spatiotemporal accessibility, particularly among working women. Longer commuting times consume the time and energy available for leisure, thereby significantly reducing the likelihood of participation in regular physical activity (Christian, 2012).

In terms of individual ability, motor skill level demonstrated a statistically significant positive association with the sustainability of sports intention. This correlation is moderated by educational background, with women who have higher levels of education demonstrating stronger skill learning abilities and a more efficient conversion of physical activity knowledge into practice (Gidlow et al., 2006). Notably, the impact of age on physical activity participation exhibits distinct life cycle characteristics; however, educational background can mitigate these age-related adverse effects, indicating that education is a crucial protective factor in maintaining lifelong physical activity participation (Trost et al., 2002). Time management ability is critical among professional women, with those employed under flexible work arrangements exhibiting significantly higher exercise frequency compared to those under fixed work schedules (Borowski et al., 2021).

At the societal environment level, multi-layered social support systems exert a profound influence on the sustainability of sports participation. Among these, the development of community-based support networks is particularly critical. Communities with well-established women's sports organizations demonstrate higher rates of sustained physical activity among residents compared to other communities. Safety perception constitutes another significant factor (Sharil & Ismail, 2019), as concerns about personal safety substantially reduce women's participation in outdoor physical activities during evening hours (Foster et al., 2014). Policy support demonstrates a notable compensatory effect, whereby well-developed public sports services can partially mitigate geographical disadvantages (Sallis et al., 2012). Employment status exerts an indirect influence through job stability and occupational stress, with women in informal employment facing a greater risk of discontinuing physical activity than their formally employed counterparts (WHO, 2008).

4. Other Factors

Women's participation intention in mass sports is shaped by a multifaceted array of factors that extend beyond the core dimensions of the Theory of Planned Behavior. In addition to its established constructs, numerous other elements play a salient role. Cultural traditions and religious beliefs exert considerable influence by reinforcing specific gender norms; in contexts where sporting cultures are strongly male-dominated, female participation rates demonstrate a pronounced decline. Furthermore, structural discrimination—manifested through institutionalized gender bias, racial prejudice, and systemic exclusivity—creates substantial barriers to entry. Research consistently indicates that women from racial minority backgrounds, including African American women, experience disproportionately limited access to sports facilities compared to their majority-group counterparts (Carrington, 2010).

At the psychological and affective level, guilt and early negative sports experiences serve as significant inhibiting factors for women's participation in physical activity. Guilt primarily operates through role conflict, which is particularly prevalent among mothers who bear primary childcare responsibilities (Hamilton & White, 2010). Meanwhile, early adverse experiences in sports create enduring psychological trauma that persistently undermines future exercise motivation (Allender et al., 2006). Teamwork requirements polarize participation: for socially-inclined women, the team environment fosters belonging and peer accountability, promoting sustained engagement; whereas for those with social anxiety, it introduces group pressure that elevates

withdrawal risk (West et al., 2019). This differential effect is moderated by three factors: personality traits (notably extraversion), the alignment of personal skills with team needs, and team size—with smaller teams proven most conducive to positive dynamics.

Media influence on women's mass sports participation is multifaceted: while diversified portrayals of female athletes in television coverage significantly boost interest in related sports, prevalent gender stereotyping continues to constrain participation (Ajeel et al., 2024). On the other hand, digital health tools present both conveniences and challenges: while fitness applications with female-specific features (e.g., menstrual cycle guidance) foster consistent sports habits, content overly emphasizing "ideal body" standards can provoke anxiety and lead to participation discontinuation (Rodgers & Melioli, 2016). Similarly, social media operates through influencer effects, where fitness influencers effectively boost female followers' engagement; however, some followers may experience frustration and ultimately abandon their exercise plans due to perceived failure to achieve the results showcased.

Conclusion

Through a systematic review, this study identified key factors influencing women's mass sports participation intentions and incorporated them into the Theory of Planned Behavior (TPB) framework. An inductive analysis of 39 variables from 30 studies constructed a four-dimensional model—attitude, subjective norm, perceived behavioral control, and other factors—to systematically elucidate the mechanisms of women's sports participation. Findings show the influences of the constructs varied significantly: perceived behavioral control had the most substantial impact, followed by attitude, while subjective norms and other factors showed weaker effects. At the variable level, self-identity, sports interest, family support, facilities, economic conditions, location, and cultural background were identified as core factors.

Further analysis revealed contextual heterogeneity in the influencing mechanisms: (1) In the attitude dimension, self-identity, interest, and health beliefs constituted core intrinsic motivators. However, their effects were significantly moderated by cultural background and education level. (2) Regarding subjective norms, family support and peer influence were particularly influential in collectivist cultural settings, whereas gender stereotypes and a lack of role models acted as potential normative barriers. (3) In terms of perceived behavioral control, sports facilities, economic costs, and transportation conditions were decisive in resource-scarce regions, while athletic ability and time constraints universally limited participation depth across female subgroups. (4) Among other factors, religious traditions, gender discrimination, and early sports experiences continuously influenced women's willingness and sustained participation through complex interactions.

Based on these findings, the following recommendations are proposed: (1) Policy interventions should prioritize enhancing community sports resources. Fiscal subsidies and infrastructure optimization can strengthen perceived behavioral control. At the same time, promoting positive media representation can help mitigate the negative impact of gender stereotypes on subjective norms. (2) Practical initiatives should establish family-peer synergy mechanisms to reinforce social support networks, develop culturally sensitive physical activity programs, and provide tailored guidance for women of different ages and educational backgrounds. (3) Future research should further investigate the interactive mechanisms and moderating pathways among multiple factors, with particular attention to the roles of traditional culture and policy environments. This will support the development of dynamic theoretical models to inform targeted interventions. 2013

Despite considerable methodological progress in women's sports research over the past two decades, our systematic review reveals a notable theoretical deficit, with only 4 of the 30 reviewed studies being explicitly theory-driven. Future studies should therefore adopt a comprehensive theory-driven paradigm that integrates three critical components: using prospective longitudinal designs to identify key predictors and establish their causal pathways systematically; integrating rigorous mixed-methods approaches to gain more profound, more nuanced insights into women's lived participation experiences and underlying cognitive processes; and developing culturally adaptive, layered interventions based on a systematic understanding of multidimensional influences to provide sustained, tailored support for diverse groups of women. This integrated "theory-

method-application" framework will substantially advance both scientific knowledge generation and practical translation in this evolving field of study.

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Conflict of Interest: The authors declare no conflict of interest.

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