

# A Study on the Influential Factors of Women Canoeists' Cross-border Transdiscipline-Based on Rooted Theory

Xinyi Chen<sup>1\*</sup>, Jia Qin<sup>1</sup>

<sup>1</sup>Jiangxi Normal University, 330022, China

\*Corresponding author: 17770337577@163.com

## Abstract

The article explores the influencing factors of women kayakers' participation in cross-border cross-training based on rootedness theory, coding the raw interview data of the interviewees in a hierarchical manner, refining the initial concepts, basic categories, main categories, and categories, and attributing the decision-making of women kayakers' participation in cross-border cross-training to the east winds of the policy, developmental constraints, perceived value, social support, personal interest, and perceived risk. Among them, policy easterly wind is a macro-environmental factor, developmental constraints are external constraints, perceived value is a personal cognitive factor, social support is a social-environmental factor, personal interest is an intrinsic motivational factor, and risk perception is a risk-assessment factor. The study not only provides academics with insights into the decision-making mechanisms of women kayakers, but also offers substantial guidance and insights for policy makers, coaches, family members, and women kayakers themselves.



Full Text Article



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**Keywords:** cross-country crossover; influencing factors; female kayakers; rootedness theory

## Introduction

In the 1980s, the ‘transfer’ and ‘cross-training’ training methods were applied to the training and competition practices of high-level athletes in some countries or regions, and achieved certain results (Collins et al., 2014; Dehghansai et al., 2023; Sæther et al., 2021; Li Yong Ming et al., 2018). After Halson's research report on alpine skiing to track cycling in 2016, the term “cross-selection” was officially used (Gao et al., 2024; Halson et al., 2006; MacNamara & Collins, 2015). With the experts and scholars in China's sports sector launched a multi-faceted and in-depth study of athletes' performance, the term “cross-cross” was proposed on the basis of the convergence of related theories of kinesiology, training, and skills (Xia Jiao Yang et al., 2021). As one of the strategies for the d

development of competitive talents in the new era, cross-border cross-sports is the path innovation of competitive sports selection mode (Wang A Ting et al., 2019). The policy-driven and institutional support at the national level is the guarantee for athletes' cross-border cross-training. China's State General Administration of Sport has begun to pay attention to and propose relevant policies as early as 2017 (General Office of the General Administration of Sport on the organisation of the 'cross-border cross-discipline selection' seminar notice \_ General Administration of Sport, n.d.). For example, in March 2017, the General Administration of Sport of China 'Notice on Carrying Out the National Winter Project Cross-border Cross-discipline Selection Work' (Interdisciplinary selection for the Winter Olympics 'full participation' solid foundation \_ National Sports Administration, n.d.) 'Overall Programme for Cross-border Cross-discipline Selection Work in Winter Project Preparation for the 2022 Winter Olympics' (The mobilisation and symposium on cross-discipline and cross-border selection for the preparation of national winter projects for the 2022 Winter Olympics was held in Beijing \_ Departmental Government \_ China.gov.cn, n.d.); and in August 2018, the General Administration of Sport of China 'Policy on Establishing a Cross-border Cross-discipline Athlete Sport Level Incentive System' (Circular of the General Office of the General Administration of Sport on the Establishment of Incentive Policies for the Levels of Cross-Discipline Athletes \_ State General Administration of Sport, n.d.). The application of cross-border cross-training breaks the single training mode of Chinese athletes to a certain extent, that is, when the development of the original project of the athlete is restricted, the athlete can find a suitable project through cross-border cross-training to realise their own value (Lin Ling et al., 2021). Cross-country cross-training has made a number of historic breakthroughs, achieving a historic breakthrough in the participation and competition results of some of China's sports from scratch (Zeng Cheng & Deng Xin Hua, 2023).

Academic research around the theme of athletes' cross-border cross-task, mainly focusing on cross-border cross-task selection (Guan Zhi Xun & Xue Lan, 2019; Jiang Zhi Yuan & Zhang Li Qing, 2019; Zhang Xin et al., 2018; Wang A Ting et al., 2019). For example, the doctrinal basis, practical logic and implementation path of cross-border cross-discipline selection in competitive sports; the research on the systematic implementation path of cross-border cross-discipline selection under the perspective of LTAD theory; the research on the key issues in the selection of volleyball 'cross-border cross-discipline' in China; the cross-border cross-discipline selection of the Beijing Winter Olympics: the achievements of the exploration, the experience revelation and the practice path. There are fewer studies on athletes' cross-border cross-sports (Li Zheng, 2022), and the research method is relatively single, mostly adopting the literature method, Telfair method and hierarchical analysis method (Yang Xin Rong, 2022), which is still in the discursive stage. On the whole, few studies have used the rooting method to conduct qualitative research on the influencing factors of cross-border cross-training for Chinese athletes. At present, the relevant research in kayaking in domestic academia mainly focuses on the project characteristics of kayaking itself, daily training, kayaking talent training, psychology, physiology and biochemistry (Yu Yin et al., 2023; Lu Xiao Chang & Lin Lin, 2012; Gao Ping et al., 2021). There are fewer studies on the participation of kayakers in cross-country sports, and the research on the influencing factors of women kayakers' cross-country sports is even more scarce.

## Research significance

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In view of this, this study starts from the athletes' perspective and adopts semi-structured interviews with female kayakers to explore the influencing factors of cross-boundary cross-tasking of female kayakers in China through rooted theories, so as to provide scientific and theoretical knowledge for athletes, coaches, sports administrators, and policy makers, thus continuously adjusting the process of athletes' selection, and providing certain reference bases for the development of female kayaking programmes in China. This will provide scientific theoretical knowledge for athletes, coaches, sports managers and policy makers, so as to continuously adjust the athlete selection process and provide certain reference basis for the development of Chinese women's kayak programme.

## Interview outline design, sample selection and data collection and processing

### *Interview outline design*

This study conducted literature research and initially designed the interview outline before data collection, and adjusted the interview outline after pre-interviews with five female kayakers with cross-border cross-competitive experiences to finally form the formal interview outline. The interviews were conducted with four groups of people: women kayakers with experience of transferring to other disciplines on their own, women rowers with experience of transferring to other disciplines on their own, women athletes who are willing to participate in kayaking through cross-country sports, and women athletes who are willing to participate in rowing through cross-country sports. Interviews were conducted offline in semi-structured audio-recorded interviews.

### *Sample selection*

The sample selection criteria for this study were as follows: 1. Meet the four categories of interview subjects; 2. Have certain language comprehension and expression ability; 3. Have time and willing to be interviewed. The sample was collected from 25 April 2023 to 9 September 2023 during the period when the China Canoeing Association held national tournaments and the national training team (water sports bases in Jiangxi, Zhejiang, Hubei, Guangdong, etc.), and 15 interviewees were finally selected as the sample of this study. The basic information is shown in Table 1:

**Table 1 Basic information of female kayaker respondents**

serial number	Surname	Genders	work unit	hierarchy	sports experience
F1	Shuai ××	women	Guizhou Water Sports Management Center	world-class athlete	Athletics, canoeing, rowing
F2	Xu××	women	Jiangxi Water Sports Management Center	world-class athlete	Rowing, kayaking, rowing
F3	Yu××	women	Guizhou Water Sports Management Center	national level fighter	canoeing, rowing

F4	Yin××	women	hejiang Water Sports Management Centre	national level fighter	canoeing, rowing
F5	Cheng××	women	Jiangxi Water Sports Management Centre	national level fighter	Kayak, dragon boat, rowing boat
F6	Xu××	women	Jiangxi Water Sports Management Centre	national level fighter	Kayak, dragon boat, rowing boat
F7	Ning××	women	Guangdong Provincial Water Sports Management Centre	national level	Kayak, rowing boat, dragon boat
F8	Xue××	women	Zhejiang Water Sports Management Centre	national level fighter	Kayak, dragon boat, rowing boat
F9	Lian××	women	Zhejiang Water Sports Management Centre	national level fighter	canoeing, rowing
F10	Liu××	women	Shanxi Water Sports Management Centre	national level fighter	Rowing, cross-country skiing, kayaking
F11	Zhu××	women	Zhejiang Water Sports Management Centre	national level	Sailing, kayaking, rowing
F12	Song××	women	Hebei Water Sports Management Centre	national level fighter	Rowing, cross-country skiing, kayaking
F13	Wang×	women	Yunnan Water Sports Management Centre	national level	Kayak, dragon boat, rowing boat
F14	Wang×	women	Zhejiang Water Sports Management Centre	national level fighter	Kayak, dragon boat, rowing boat
F15	Yu××	women	Zhejiang Water Sports Management Centre	world-class athlete	Rowing, cross-country skiing, kayaking

### *Data collection and processing*

In order to create a relaxed and favorable interview atmosphere and to understand the real feelings of the interviewees, in addition to the core questions, different questions were asked during the interviews according to the actual situation of the interviews. At the same time, in order to ensure the reliability of the data, the audio data were converted into text data in a timely manner after the interview.

views, and the text data were corrected and refined by the interviewees, which were finally organized to form 15 pieces of text data named after F-X.

**Scope refinement and content construction**

*Open coding*

Open coding is the process of decomposing, comparing and categorizing the collected raw data. By selecting statements with higher frequency of concepts and more concentrated category clustering, the refined statements with normal distribution were screened out as the original data for category refinement. In this open coding exercise, 25 categories were sorted out for eligible female kayakers, and the specific coding content is shown in Table 2.

**Table 2 Open coding of women kayakers' cross-border crossover events**

Initial scope	Initial concepts	original statement
Policy support	Policies are promoting active participation in cross-border cross-subjects	In order to promote the rapid development of women's rowing, the domestic canoeing program has carried out a series of race reforms in those years, which will give some policy support to cross-discipline athletes, and most of the athletes around me have gone to participate in the cross-discipline women's rowing training. All the policy opportunities, if as a coach to consider, when the policy favors which program, I will certainly choose to focus on the development of which program.
Policy incentives	The State provides certain material incentives to cross-border athletes.	We can only say that on the basis of the original material to give you some policy incentives, such as getting the top three in the country to give you what incentives, so that you will go across, right? If nothing is given to you, will you be willing to cross?
policy inclination	Driven from above and required by policy	Your own municipalities or provinces for this program is not to give the greatest support, you do not have to support who engage in this project. For example, training equipment and other things need to be supported, is not it? There is also a policy support similar to the package allocation
policy protection	Policy push to give guarantees to return to original project	It is still mainly a matter of policy. For the sake of policy and social development, we are definitely willing to dedicate ourselves to society and choose to participate in cross-border crossover projects.
limited by one's gift	The original program wasn't a good fit for me.	Whether or not I'm a good fit for the program I'm in depends on my own situation, and it's definitely important to choose a cross-border crossover direction in line with my own specialties and characteristics area.
development	The original program	If there is a bottleneck in my level of athleticism in the sport

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bottleneck	m has been practicing for years without a breakthrough.	rt I was originally working on that I may not be able to break through for 1-2 years, I choose to go crossfit and try a new sport.
Injuries and illnesses have hampered	Injuries recur from time to time, making it difficult to keep up with a systematic training routine	At the time, I crossed over because I had a recurring knee injury that made it difficult for me to keep up with my training routine.
Maslow's hierarchy of needs	The original program has not been well developed and self-worth has not been realized	If the new program can bring me higher achievement, or challenge a higher platform to prove my self-worth. Challenging the highest platform and realizing self-worth is actually a phrase, like there are some track and field athletes who have only reached the level of the second level, and they can only go to a university, but if he switches to water sports, then he can't say that he can still be in the team, and he can also do other things, so won't he realize his self-worth?
Development Opportunities	Crossing over to a new program brings me to a higher level of achievement.	At that time, the province was going to make a big effort to develop women's rowing as an emerging sport, and I felt it was an opportunity to try to break through what I had achieved in the kayak program.
Seeking a breakthrough	Trying to break through your existing performance through cross-competitions	I felt that the original program was not suitable for me, and it was very difficult for me to achieve results, so I decided to try a new program. At that time, after practicing for two years, I didn't get any results, and I originally wanted to give up and go back to school, but thinking about the fact that I had been practicing for so many years, it would be a pity if I quit in the middle of the year, so I tried the cross-border cross-country program.
recognition by others	Recognition from friends and family for my crossover crossovers	After crossfit, my foreign coach at the time helped me a lot, both in training and competitions, he was very optimistic about me and gave me motivation.
Coaching Guidelines	Coach will consider whether to do cross-country from the perspective of my own development.	The coach guided me to switch to the women's rowing program, when he encouraged me that women's rowing was an emerging program, and also more suitable for my development and better results. Is not your own program coach's willingness. If your coach doesn't agree with you, how can you do it? Family support, coach support, my coach said this is good, there is no doubt. Just like Xu Shixiao she came back to practice, coach Peng is not to give the main support.
Friends and family support	Support from family and friends for me	At that time, our senior sister thought I was perfect for rowing and recommended me to try it, and then my family was

	y involvement in cr oss-border cross-co untry programs	fully supportive of my decision, so I had no worries.
financial ince ntive	Participation in cro ss-border cross-pro gramming can be re warded with a certa in amount of remun eration.	At that time, the program we crossed could more easily ach ieve good results in the country, like our unit would give jo b assignments after retirement if we got the top three place s in the country.
inquisitive	Curiosity about cro ss-border crossover s	I think the reason I would cross over is my internal motivat ion, a new program is definitely more directionally oriente d than the one I'm currently practicing, or even a new progr am for me that I've never been in before, and it will give m e a sense of freshness, direction, and it will help me realize another value, or help me get something
one's own em otions	Personally, I'm inte rested in cross-bord er crossover progra ms	Do I like or dislike the program, if you pick people who do n't like the water to paddle, then they won't want to, so man y athletes in track and field don't like water sports. In fact, similar to their own favorite, it can affect my motivation to participate. A motivation is big, you will want to practice, can go to practice, you will not want, how will you go to
tendency foll ow the crowd	Friends in the neigh borhood are involv ed in cross-border c rossovers	At the time I thought I'm going to be with my teammates a nd I can't run off to rowing practice by myself because they 're still practicing kayaking, so I turned down crossfit. At t he time, my teammates who were playing well around me were going to cross-cross and I just really wanted to go wit h them.
willingness t o experiment	Loves to try new th ings	If I was younger at the time, I would definitely still be willi ng to try a little more for the future
development concern	Feeling abandoned deep down.	At the time the coach suggested I go to a different progra m, I had a feeling he had given up on me and wanted me to go to a different program.
development concern	Concerns about the prospect of particip ating in cross-borde r cross-projects and the development of the original project	It's to give me some security in my back pocket, or if I swit ched programs, I wouldn't go if I didn't have this possibilit y of being able to go back to my original program at any ti me
Occupational risk	Concerns about fut ure employment thr ough cross-border i nterdisciplinarity	At that time I was just told to cross the program, I did not c ross. At that time, didn't they say that all female leather ath letes after '97 had to cross women's rowing, and I just refus ed because I had already achieved a little bit of success on my own at that time, and then the foundation that I had laid



Motivation for capacity enhancement	Cross-country can improve one's athletic ability	in the original program was here, so I wouldn't want to cross the program! I think cross-country is an opportunity for me, it provides a higher platform and exposure to higher level athletes, and who doesn't want to become a better version of themselves. If an athlete has a need, such as a desire to continue to develop or make a breakthrough, he or she will definitely be willing to try cross-discipline!
altruistic motivation	Being able to help others through participation in cross-border cross-curricular activities	I believe that cross-border sports can help the interoperability between programs, promote the faster development of programs, and provide more choices and opportunities for the development of outstanding athletic talents. At that time, both emerging and disadvantaged Olympic programs were in urgent need of reserve talents, so if I could make some contribution to the development of national sports through my efforts, I think it is very meaningful.
Motivation for career development	Participation in cross-border cross-curricular activities can lay the foundation for future employment.	I would choose to cross over if the program would make me more employable in the future, including some career advancement later on.

**Spindleability coding**

The main axis coding was divided into two steps: 1. Refining the main categories, integrating the 25 initial categories into 7 main categories; 2. Categorizing the main categories. The seven main categories were classified into policy east, developmental constraints, perceived value, social support, personal interest, risk perception, and behavioral motivation, as shown in Table 3.

**Table 3 Principal axiality coding of women kayakers crossing over to cross disciplines**

maincategory	subcategory	Connotation of scope
policyleeway	PolicySupport	The state gives cross-border cross-discipline athletes certain policy support; material incentives; our provincial and municipal units attach great importance to cross-border cross-discipline talent cultivation; the policy gives the guarantee of returning to the original program
	Policy Incentives	
	Policy Preferences	
	Policy Guarantees	
Constraints on development	Talent constraints	My original program is not suitable for my development; I haven't made any breakthrough after so many years of practicing in my original program; my injuries come back from time to time, so it's hard for me to ensure my daily systemati
	Developmental bottlenecks	
	Injuries and illnesses	

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	ses	c training.
perceived value	Self-actualization Development Opportunities Seeking breakthroughs Recognition Coaching Guidelines	Crossover can provide a platform to realize my self-worth; Crossover will be a better development opportunity for me; I feel that my original program is not suitable for me and it is very difficult for me to achieve results, so I decided to try a new program; Crossover can help me find a sense of belonging and get the recognition of other people
social support	Family and Friends Support Financial Incentives Fresh and Curious	Coach's family and friends are very supportive of my involvement in cross-country; involvement in cross-country will allow me to earn more salary incentives
personal interest	Self-emotion Tendency to follow the crowd willingness to experiment	Freshness and curiosity about a certain sport, own interest and love for a certain sport, friends around you are going to participate in cross-country cross-training, want to try more sports finally choose cross-country cross-training
risk perception	perceived Abandonment Developmental Concerns Career Risks	When my coach suggests that I switch sports, I feel as if he has already given up on me; I am afraid that if I fail to succeed in my new sport, the development of my original sport will be delayed, and I will end up with no results on either side of the fence; I am worried that my athletic career will be delayed if I re-engage in a new sport.
Behavioral motives	Competence Enhancement Motivation Altruistic Motivation Career Development Motivation	Cross-country can help me break through my current performance; cross-country can contribute to the development of national sports; cross-country can improve my self-confidence in my career.

**Selective coding**

Selective coding was used to construct the core categories of women canoeists' participation in cross-border cross-country, and to analyze the structure and connotation of the relationship between the core categories and the main categories. By integrating the seven main categories obtained from the principal axis coding, and finally incorporating the seven main categories into the S-O-R model, the theoretical framework of the influencing factors of women kayakers' participation in cross-bord

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er cross-training was obtained, as shown in Table 4.

**Table 4 Selective coding of women kayakers crossing over to cross disciplines**

S environmental stimuli	O Individual status	R Individual response
Policy East Wind		
Development constraints		
Perceived Value	Behavioral motives	Willingness to participate
Social Support		
Personal Interest		
Perceived Risk		

### *Theoretical saturation test*

To ensure good reliability and validity of the research categories, after completing open coding, s pindle coding, and selective coding of 12 female kayakers' participation in a cross-border cross-cate gory event, this study recoded the interview data of three female kayakers who had not participated in the coding previously in the same form, and the results did not reveal any new constructs, categor ies, or structural correlations, which indicated that the female kayakers' The modeling of influences on participation in cross-border interdisciplinary events was complete and saturated.

### **Analysis of Factors Influencing Women Canoeists' Participation in Cross-Country Cross-Disciplines**

The present study investigates the factors affecting women kayakers' cross-border participation in cross-country sports, covering multiple dimensions from the macro policy level to the individual's heart level. Through careful analysis of policy, developmental constraints, perceived value, social s upport, personal interest and perceived risk, we explain the combined effects of these factors in diff erent environmental and psychological contexts, which in turn shape the career paths of women kay akers and their cross-discipline participation decisions.

Policy dongs refer to various preferential policies developed by governments and sports organizat ions to promote women kayakers. Policies can encourage athletes to explore new sports through inc entives or the provision of additional resources, and play a key role in the strategic and long-term pl anning of sport program development. These policies can include the provision of specialized traini ng facilities for women kayakers, increased funding for programs for women kayakers, and the esta blishment of incentive programs for women kayakers. Government funding and sports organization s may incentivize women kayakers to try new events and increase their cross-border cross-disciplin e participation. Policy support may lower the financial and resource barriers to participation in new programs and increase the likelihood of cross-border cross-sport participation among women kayak ers. For example, Wang XX mentioned in the interview that it is mainly a policy issue, and for the s ake of the policy and the development of the society, we are definitely willing to dedicate ourselves to the society and choose to participate in cross-border cross-tournament. If there is no policy pressi ng, it is for the prize money. The State General Administration of Sport and other administrative de

partments have introduced a number of policies and established horizontal synergy mechanisms and vertical mobilization mechanisms in order to open up channels for the delivery and growth of cross-border cross-sport athletes.

Developmental constraints relate to the challenges faced by female athletes in sport, such as resource constraints, inadequate training opportunities, and gender discrimination. Insufficient resources may lead female kayakers to look for other programs as alternative paths or turn to other programs in pursuit of better development opportunities. For example, Cheng xx believes that from my perspective, if I really cannot practice and have run out of development on this side of the original program, then I will only choose to switch to another program to seek development.

Perceived value is an athlete's perception of the personal and professional value of cross-discipline participation. From an athlete's perspective, participation in a cross-border cross-sport sport can be perceived by the athletes themselves as affecting skill enhancement, increased exposure, and improved competitiveness. Athletes may perceive participation in a new sport as providing challenges and learning opportunities that enhance their competitiveness in the sport. A LUxx women's kayaker believes that if the new program can bring me to a higher level of achievement, or challenge me to a higher platform, and be able to get more opportunities to compete with world competitors and improve my competitiveness. I will definitely give it a try.

Social support includes encouragement and support from family, coach, team and social media. From an athlete's perspective, social support may provide athletes with the necessary emotional and resource support to help women kayakers overcome the difficulties and challenges of the cross-border interdisciplinary process. Strong social support may increase the self-confidence and motivation of female kayakers and help them remain resilient in the face of challenges. Family support can reduce athletes' psychological pressure, and coaches' guidance can help them better adapt to the new program. For example, Liu xx believes that the leaders, coaches and leaders supported me to participate in cross-border cross-discipline, so I successfully switched from cross-country skiing events to women's kayaking. If I choose to do it myself, I don't think I would think about cross-country sports in general.

Personal interest is an athlete's personal preference and passion for a new sport or cross-border competition. Interest may be the main driver for athletes to explore new programs and push their limits. Women kayakers will choose whether to participate in cross-border competitions based on their personal interests and passions, i.e., when women kayakers are interested in a new sport, they may be more proactive in seeking related training and competition opportunities. For example, Ning XX mentioned in the interview that she chose the never-experienced and more difficult paddling program because of her interest in extreme challenges and curiosity about new programs.

Risk perception involves the awareness and assessment of the risks that may be associated with participation in a new program by female kayakers. Risk perception may influence an athlete's mental state and ultimate decision making. Athletes weigh these risks as a way of deciding whether or not to participate in a kayaking program through cross-border crossover. If the risks are too high, they may choose not to participate. For example, Yang xx mentioned in the interview, do all women kayakers after '97 have to cross women's paddling programs, and I just refused because at that time I already had a bit of success on my own, and then the foundation that I laid in the original program was here, so I wouldn't have wanted to go cross-cross-curricular.

## Conclusion

Through semi-structured interviews and the use of rooted theory research methods, this study attempts to construct a model of the influence of women kayakers' participation in cross-border cross-country from the athletes' perspective, and draws the following conclusions. First, the six main categories of policy, developmental constraints, perceived value, social support, personal interest and perceived risk have an impact on women kayakers' participation in cross-border cross-training, with behavioral motivation as a mediating variable. The six main categories influence women kayakers' willingness to participate in cross-border cross-training through mediating variables. Among them, the policy wind is a macro-environmental factor, which involves policies at the level of government and sports organizations, and has a direct impact on the career development of women kayakers. Limited development is an external constraint, involving resource allocation, training opportunities and other external limitations, which affects athletes' development space and choices. Social support is a social environment factor, involving support from family, coach, team, etc., which positively affects athletes' psychological and career development. Personal interest is an intrinsic motivation factor that stems from athletes' personal preferences and passions, driving them to explore new areas and challenges. Risk perception is a risk assessment factor, originating from the sport and the subjective assessment of the potential risks of new programs, which affects their decision-making to participate in cross-border cross-sports. Secondly, perceived value, personal interest, and risk perception are direct factors that influence women kayakers' decision-making to participate in cross-border cross-training; while policy easterly winds, social support, and developmental constraints are indirect factors that indirectly influence women kayakers' decision-making to participate in cross-border cross-training by influencing the external environment and resource allocation. Even the best policies can only be effective if they are implemented by individuals. Social support and risk perception can influence women's participation in cross-country decision-making, accumulating quantitative changes, while the final qualitative changes need to be decided by individuals.

In this study, semi-structured interviews were conducted with female kayakers, and based on the athletes' perspectives, a model of the influencing factors of female kayakers' participation in cross-border interdisciplinary sports was summarized from the rooted theory of sports, with a focus on how the policy winds, developmental constraints, perceived value, social support, personal interest, and risk perception affect the behavioral choice of cross-border interdisciplinary participation of female kayakers to provide intellectual support for athletes, coaches, sport administrators, and policy makers. administrators, and policy makers with intellectual support. There are some limitations in this study: first, the interview sample source is not sufficiently global, and a larger number and wider distribution of research studies are needed. Secondly, this study lacks the cross-country investigation and analysis of women kayakers' participation in other sports, and fails to completely outline the psychological benefits of women kayakers' participation in cross-country cross-country sports, which requires further in-depth and extended research in the future.

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## Conflict of Interest

The authors declare no conflict of interest.

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