



The reasons of nonparticipation in physical activity in Iran: An exploratory analysis

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Article Info	Abstract
<p>Article type: Original Article</p> <p>Article history: Received: 18 March 2024 Revised: 27 May 2024 Accepted: 16 June 2024 Published online: 01 July 2024</p> <p>Keywords: exploratory analysis, inhibitor and driving factors, nonparticipation, sport development, sport property.</p>	<p>Background: In the past few years, the increasing importance of the impact of exercise on physical and mental health has caused mobility wave around the world. Nevertheless, in Iran, a few people participate in physical activities.</p> <p>Aim: This study aimed to assess the reasons of nonparticipation in physical activity in Iran.</p> <p>Materials and Methods: This research is a descriptive and analytical approach conducted as a field study. The population of this research includes all people in Iran.</p> <p>Results: The results revealed that this factors are effective: three factors in individual characteristics variable (lack of sports skills, fatigue and impatience, fear of injury), four factors in inhibitor variable (lack of access to sports facilities and venues, poor quality of sports facilities and venues, being too busy, low income), four factors in environmental driving variable (lack of proper planning for sports, lack of awareness of the advantage of sport activities, feeling embarrassed after the loss, low number of exclusive sports facilities) and two factors in sports features variable (fear of winning and losing in sports, high intensity and duration of sport activities).</p> <p>Conclusion: Findings indicated that the environmental variable and inhibitor variable were more effective than two other variables, hence authorities and planners should pay more attention to these obstacles and problems with better management and provision of infrastructure facilities. These problems must be solved and strategies must be developed for promotion of sports in the country.</p>

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1. Introduction

Exercise is one way of helping people to reduce physical, emotional, social and psychological stress of living in today's chaotic world [1]. Physical activity remains one of the most important factors affecting the well-being, health, and quality of life of individuals and entire populations. Unfortunately, the level of physical activity in many social groups is still insufficient according to the recommendations of the World Health Organization (WHO) and other international and national scientific societies [2].

Studies have shown that people, who regularly exercise, suffer cardiovascular disorders less than others, and are exposed to less stress and more confident; also, these peoples are more optimistic, with lower rates of depression [3]. One of the key issues is having positive properties arising from exercise, which is one of the goals of the planners and organizers to increase productivity and progress in any country by human resources [4].

According to estimates, the total cost of physical inactivity globally would be approximately \$520 billion over an 11-year period (2020–2030) if global levels of physical activity are not increased [5].

Several countries around the world execute macro plans annually to implement the plans in line with people's needs. In Iran, most of the policies were applied for the participation of different groups to exercise, but they were not very effective [6]. Researched results show that lack of time, lack of interest, lack of facilities and investment are barriers to participation in recreational and physical activities [7]. In addition, in the study of inhibitory factors for participation in sport activities, it was

revealed that women face more obstacles than men in participating in sports activities [8].

After participating in sport activities, many people leave these activities again due to many reasons. Studies have shown that the process of reducing the percentage of participants occurs in the first six months and stops after eighteen months [9]. After solving the basic restrictions and performing sports activities again, people have the challenge of adherence to exercise or sport programs. They have expressed causes of absence of women in sport activities, which include lack of companion for participation in sport activities, shyness, lack of awareness, lack of vehicles and physical disability [10].

Since 1970, some researches have been provided for study and identification of inhibitory factors of sport and recreation activities around the world. Researchers proposed and applied many research projects where personal and social barriers and other obstacles to participation in sports and recreational activities were investigated in all of them [11].

Persson (2016) ranked factors affecting the participation in Sweden in which internal motivation has been indicated as one of the most important factors [10]. In another study, Keshkar and Ehsani (2006) showed that one of the inhibitory factors of men to exercise, include inadequate information to individuals, because they were unaware of the service provided and the existence of services for sport activities [12]. The results of other studies in Iran revealed that lack of interest, lack of time, lack of motivation, no proper planning in schools, lack of access to sports saloons, shortage and expensive sports equipment, social and cultural limits and parental opposition are factors affecting the

lack of active participation of male and female students in sport activities [13]. Many researches have been carried out on the barriers to women's participation and one of the investigations was on the barriers to participation. According to the Pyramid model of Crawford by Fattahian et al. (2012), among the structural, personal and interpersonal fields, structural field has the highest priority in removing barriers [13]. In addition, according to the hierarchical model, Crawford, Jackson and Godbey (1991) have identified three categories of limitations: intrapersonal limitations, interpersonal limitations, structural limitations [14]:

- Interpersonal attributes exist as psychological conditions within each individual such as personality, attitudes and inner states.
- Intrapersonal attributes include interaction with others such as family, friends, colleagues and neighbors.
- Structural factors include lack of opportunities and/or the cost of activities that applied pressure on people from the external environment.

Also, in the research of McNamara et al. (2023), on people aged 45 and over, the individual characteristics of people have been very influential, in a way, it is their most important indicator [15].

Based on the issues raised, it can be deduced that motivations (attractions) and inhibiting factors reversely affect participation in sports activities. Later many scientists have criticized these findings [16]. Because when a person balances between the constraints and motivations, they gradually tend to choose sport activities and consistently continue.

Some studies have also mentioned motivations. Naderian Jahromi and Hashemi

(2009) have studied motivations in recreational sports and have pointed out health and hygiene, fitness and the skills and abilities as the most important incentives [17].

Regarding the issues listed, we have considered four dimensions of limitations to identify constraints for different groups of people across the country. The first dimension is individual limits that are relevant to the individual; the second dimension is obstacles that are divided into financial, environmental and structural barriers; the third dimension is constraints related to environmental drivers; and the last dimension is sports attributes.

Given that physical activity is an important component of a healthy lifestyle, with many physical and psychological benefits to all classes, this study attempts to identify limitations of people across the country and to carry out necessary measures to promote public participation levels in sport after studying the necessary investigations why so sport in leisure time has become a prominent feature of the quality of life of societies with a high level of development, and it is especially considered as a measure of individual freedom, participation in social life, and the well-being of citizens living there [18].

2. Materials and Methods

This research is a mixed research that has actually used a combination of two qualitative methods (Delphi) and quantitative methods. Researcher may distinguish this method from others based on four characteristics: anonymity of participants, iterative rounds of data collection, controlled feedback among participants, and statistical analysis. Moreover, according to Scott's

model (2000), it is possible to utilize the expert opinions of participants (research experts) through three rounds involving approximately 20 individuals. Given the requirement for specialized participants, purposive sampling was used. At this stage, the researcher continued the study with 14 experts after reaching saturation of expert opinions.

In data collection using the Delphi method, two key aspects were considered: data collection instruments and the number of rounds. Each round necessitated prior design and planning before execution. The distinguishing feature of this method is that the design of subsequent rounds is based on the analysis of data from the previous round. In the qualitative phase and Delphi panel, efforts were made to incorporate the perspectives of sports experts in administrative and executive roles, as well as university professors, considering the geographical distribution of the study.

In terms of objective, it is an applied study and is conducted as a field study. The population of this research comprises experts in psychology and sport management disciplines with snowball technique and with 14 people, it reached theoretical saturation.

The population of this research comprised all the people in Iran and due to a large population (80 million people), a total of 400 people were selected using cluster random sampling from among five regions of the country (North, South, West, East and Central). Finally, 365 questionnaires were returned to the researcher after eliminating incomplete and semi-finished cases.

The Delphi data collection process was conducted as follows: the findings from the comparative studies were shared as background information, and experts were

requested to provide open-ended feedback and a list of desired topics. A structured, closed-ended questionnaire was then developed based on the experts' input. The aggregated questionnaire from the first round was distributed to the experts, who were asked to review their responses and provide reasons for any disagreements. Finally, the results were finalized and presented to the experts for final approval.

Subsequently, the research instrument was distributed in five provinces across the country (Mazandaran, Hormozgan, Kermanshah, Khorasan Razavi, and Tehran) through field surveys. After removing incomplete responses, the data were aggregated.

The research instruments were self-designed questionnaire derived from interviews with experts and monitored by them and were designed in two sections; demographic attributes and main questions to determine the validity and reliability after reviewing internal and external sources, as well as questions and opinions of several professors (n= 13). According to these questions, they were matched to the country's sports culture and distributed between samples.

In order to measure the reliability, Cronbach's alpha was used and finally alpha coefficient of 0.89 was obtained. Also, SPSS software version 22 was used to analyze data.

3. Results

According to the results, the number of participants was 365 between the age of 31 and 35 years. Most of the samples have history of 5 to 15 years and Bachelor degree had the highest percentage among the academic certificate. Also, people in the field of education have the highest frequency

among service categories. On average, participants had 0.07 hours exercise training, in a week and the average distance of the sample to sports venues has been 2.2km which represents a short distance to sporting venues.

Table 1 presents eigenvalues and variance corresponding to the factors in first variable namely individual features. In the column related to the sum of the coefficients, primary eigenvalues for every factor are estimated in the form of total explained variance. Explained variance is a percentage of the total variance and the cumulative percentage. Eigenvalues for each factor is a proportion of the total variance of variables which is explained by that factor. Eigen value is significant from the sum of squares of factor loadings related to all the variables in this factor, therefore, eigenvalues show

explorative significance in connection to the variable. The lower quantity for a factor implies that the factor had a minor role in explaining the variance of variables. In this table, column related to the sum of the coefficients of cyclical factors represents a set of values extracted after rotation. According to the results, there are three components that contain 58.370% of the total variance of the data. The above data after varimax rotation are as follow: lack of sports skills= 20.77, fatigue and impatience= 18.98, fear of injury: 18.60 which represent 58.37% of the total variance.

Table 2 shows rotation matrix of components that are factor loadings of each variable in the residual factor after rotating. We know that the higher absolute value of the coefficient leads to the greater role of the relevant factor in total variation.

Table 1. The eigenvalues and variance of research variance

Components	Initial eigenvalues			Rotation sums of squared loadings		
	Total	Variance (%)	Cumulative (%)	Total	Variance (%)	Cumulative (%)
Health problems	3.054	33.930	33.930	1.870	20.775	20.775
Fatigue related to everyday tasks	1.115	12.393	46.323	1.709	18.988	39.763
Lack of operational skills	1.084	12.048	58.370	1.675	18.608	58.370
Lack of interest in sports	0.924	10.262	68.633	-	-	-
Low confidence due to poor body	0.703	7.816	76.448	-	-	-
Low self-esteem due to poor skill	0.653	7.252	83.700	-	-	-
Laziness and impatience	0.617	6.857	90.557	-	-	-
Fear of injury and sports injury	0.475	5.277	95.834	-	-	-
Limited time or opportunity	0.375	4.166	100.000	-	-	-

Table 2. Rotated factor matrix values

	Components		
	1	2	3
Low self-esteem due to poor skill	0.787	-0.020	0.004
Lack of skills for playing sports	0.708	0.437	0.007
Low confidence due to poor body	0.515	-0.025	0.359
Limited time or opportunity	0.467	0.264	0.384
Fatigue related to everyday tasks	-0.109	0.776	0.060
Health problems (disease and injury, ...)	0.230	0.696	0.127
Lack of interest in sports	0.409	0.539	0.269
Laziness and impatience	0.187	0.015	0.841
Fear of injury	-0.015	0.263	0.774

According to the results of research in Table 2, following parameters were identified:

1. Lack of skills for playing sports
2. Low self-esteem due to poor skills
3. Fatigue related to everyday tasks
4. Laziness and impatience
5. Fear of injury.

Table 3 shows eigenvalues and variance corresponding to the second factors affecting mean deterrent obstacles. According to the explanations of the first variable, and also according to the results obtained, there are four factor components that encompass

91.64% of the total data variance. The above data after varimax rotation represents lack of access to sport venues and facilities: 77.20, low quality sports venues and facilities: 17.17, busy working: 51.16, low income: 34.16, respectively and finally represents 91.64% of the total variance.

Table 4 shows rotation matrix of components which is factor loadings of each variable in residual factor after the rotation. As we mentioned, the higher absolute value of the coefficient leads to the greater role of the relevant factor in total variation.

Table 3. Eigenvalues and variance of research factors

Component	Initial eigenvalues			Rotation sums of squared loadings		
	Total	Variance (%)	Cumulative (%)	Total	Variance (%)	Cumulative (%)
Low income	2.869	28.686	28.686	1.717	17.171	17.171
Travel costs	1.358	13.577	42.262	1.652	16.516	33.686
Sport places costs	1.251	12.513	54.776	1.634	16.340	50.026
Bad weather conditions	1.013	10.134	64.910	1.488	14.884	64.910
The unavailability of sport places	0.912	9.115	74.025	-	-	-
Low quality sport places	0.799	7.992	82.017	-	-	-
Unsanitary sport places	0.612	6.116	88.133	-	-	-
Lack of careful planning	0.470	4.703	92.836	-	-	-
Busy working	0.426	4.259	97.096	-	-	-
Childcare	0.290	2.904	100.000	-	-	-

Table 4. Rotated factor matrix values

	Components			
	1	2	3	4
Bad weather conditions	0.926	0.023	0.052	0.058
The unavailability of sport places	0.829	0.163	0.265	0.086
Travel costs	0.200	0.759	0.262	0.008
Low income	0.045	0.730	0.199	0.059
Costs of sport places	-0.009	0.629	-0.174	0.082
Unsanitary sport places	0.133	-0.013	0.851	0.115
Low quality sport places	0.151	0.219	0.816	0.145
Busy working	-0.159	-0.078	0.136	0.820
Childcare	0.143	0.069	0.038	0.734
Lack of careful planning	0.211	0.249	0.112	0.472

According to the results of research in Table 4, in the second variable, effective parameters are identified as follow:

1. Bad weather conditions
2. The unavailability of sport places
3. High costs related to travel
4. Low income samples

5. Unsanitary sport places
6. Low quality sport places
7. Busy working
8. Childcare.

In the third section, we explore the impact of the third variable which is

environmental driving on lack of educator's participation in sport activity in Iran. Table 5 shows eigenvalues and variance corresponding to variable factors. In this case, also according to the results obtained, there are four factor components that include 27.54% of total data variance. The above data after varimax rotation are lack of proper planning for educator's physical activity: 56.21%, useful sports activities: 45.15%, feeling ashamed after losing: 36.9%, the low

number of sport venues for educators: 88.7% and in total, it explains 54.27% of total variance.

Table 6 shows rotated matrix of components which is the loading factors of each variable in residual factors after rotating. As we mentioned, the higher absolute value of the coefficient leads to the greater role of the relevant factor in total variable variance.

Table 5. Eigen values and research factors variance

Component	Initial eigenvalues			Rotation sums of squared loadings		
	Total	Variance (%)	Cumulative (%)	Total	Variance (%)	Cumulative (%)
Cultural constraints	3.656	26.118	26.118	3.019	21.567	21.567
The small number of sports places and facilities	1.695	12.111	38.228	2.164	15.459	37.025
Lack of proper planning	1.167	8.336	46.564	1.311	9.363	46.388
Lack of awareness of the benefits of physical exercise	1.079	7.706	54.270	1.104	7.882	54.270
Lack of awareness of the benefits of physical exercise	0.977	6.975	61.246	-	-	-
Lack of knowledge about sport rules	0.954	6.812	68.058	-	-	-
Lack of proper information media	0.891	6.365	74.423	-	-	-
Lack of support from family	0.680	4.855	79.278	-	-	-
Lack of willing friends and colleagues	0.653	4.661	83.939	-	-	-
No accompanist and playmates	0.588	4.198	88.137	-	-	-
Lack of favorite exercise	0.515	3.681	91.818	-	-	-
Fear of losing	0.453	3.235	95.053	-	-	-
Lack of knowledge about existing sports	0.377	2.693	97.746	-	-	-
Feelings of embarrassment due to the presence in sports places	0.316	2.254	100.000	-	-	-

Table 6. Rotated factor matrix values

	Component			
	1	2	3	4
Lack of knowledge about existing sport	0.804	0.087	0.024	-0.011
Fear of losing	0.753	0.121	0.067	0.119
Feelings of embarrassment due to the presence in sports places	0.752	-0.109	0.004	0.055
Lack of knowledge about sport rules	0.570	0.254	0.270	-0.088
The small number of sports places and facilities	-0.185	0.709	0.050	0.185
Cultural constraints in sports spaces	0.198	0.686	0.150	0.126
Lack of favorite sports	0.316	0.599	-0.097	-0.076
Lack of willing friends and colleagues	0.523	0.539	-0.074	-0.037
Lack of support from family	-0.001	0.521	0.030	-0.146
Lack of awareness of the psychological benefits of exercise	0.202	0.159	0.714	-0.145
Lack of awareness of the benefits of physical exercise	0.529	0.201	0.566	-0.006
No accompanist and playmate	0.229	0.216	-0.562	-0.245
Lack of proper planning	-0.080	0.163	-0.117	0.807
Lack of proper information media	0.299	-0.181	0.177	0.517

According to the results of research in Table 6, in environmental driving variable, effective parameters are identified as follow:

1. Lack of proper planning toward educators' sports activities
2. Lack of knowledge about existing sport
3. Fear of losing
4. Feelings of embarrassment due to the presence in sports venues
5. Lack of awareness of the psychological benefits of exercise
6. The low number of sports venues and facilities.

In the final section, we explore the next effective relationship of variable that contains attributes of sports activities. Table

8 shows eigenvalues and variance corresponding to the factors of this variable. There are two factor components that include 51.59% of total variance of data. The above data after rotation varimax are the fear of winning and losing in sport activities: 31.40, duration and intensity of sports activities: 19.19 which explains a total of 59.51% of the total variance.

Table 8 shows rotated matrix of components which is the loading factors of each variable in residual factors after the rotation. As we mentioned, the higher absolute value of the coefficient leads to the greater role of the relevant factor in total variable variance.

Table 7. Eigenvalues and research factors variance

Component	Initial eigenvalues			Rotation sums of squared loadings		
	Total	Variance (%)	Cumulative (%)	Total	Variance (%)	Cumulative (%)
Low attractiveness in sports	2.447	40.789	40.789	2.419	40.313	40.313
High-intensity sports activities	1.123	18.722	59.511	1.152	19.198	59.511
Long duration of sports activities	0.806	13.433	72.944	-	-	-
Fear of winning and losing in sports	0.705	11.754	84.698	-	-	-
Lack of favorite sports	0.530	8.839	93.536	-	-	-
Lack of interest in exciting sports	0.388	6.464	100.000	-	-	-

Table 8. Rotated factor matrix values

	Component	
	1	2
Fear of winning and losing in sports	0.830	0.164
High-intensity sports activities	0.768	-0.044
Long duration of sports activities	0.757	0.106
Low attractiveness in sports	0.655	-0.062
Interest in exciting sports	-0.204	0.861
Lack of favorite sports	0.312	0.686

According to the results of research in Table 8, regarding characteristics of sport activities variable, effective parameters are identified as follow:

1. Fear of winning and losing in sports
2. High-intensity sports activities
3. Long duration of sports activities.

4. Discussion

This study examined the relationship between various factors and low participation in sports activities within a sample population in Iran. We employed a survey methodology to identify nine key factors contributing to this phenomenon, categorized

into three distinct variables: (1) individual characteristics, (2) deterrent obstacles, and (3) impellent factors (promoters). One of the parameters to the nine factors considered for this variable was lack of sports skills and consequently low confidence which was known as one of the factors affecting low participation of people and next, laziness and boredom of everyday tasks and then fear of injury was the fifth factor related to the first variable. Physical fatigue and busy working lead to mental concerns and impatience and laziness such that sports activities have no attraction for them. Although science has proven that physical exercises are not only ineffective in increasing fatigue, they also improve physical and mental conditions after a short time of sporting activities. This result is antithetic to the result of Bailey et al. (2010) [11]. Obstacles (deterrent) are barriers for participation in sports activities. After removing individual restrictions, people can choose sports activities for their leisure time to confront obstacles (financial obstacles, environmental and structural barriers) that depend on the individual and the environment.

This result is inconsistent with the results of European Commission (2017) [8]. Financial problems include low income and high cost of participation in activities such as travel cost to sports venues and the use of sports facilities as well as environmental barriers including low quality sport venues are issues that have been cited in a lot of research about different groups in our society.

Due to the economic conditions of the society in Iran, all this research suggested that there is instability in the management of sports organizations that imposed heavy costs. According to these results, it can be

considered that by removing or minimizing these obstacles, interest to participate in sports activities can be increased. The multicultural differences of the population are targeted in the third variable which sports is driving variable. Impellent are promoters in participation in sports activities. It means that a person psychologically feels the need for sports-activities, then after the decision to participate, they will be faced with impellent.

One of the main factors of teacher impellent can be planning in organizations or subordinate offices to increase their participation as well as the availability of relevant facilities. Subjects in the sample expressed weakness in the services as factors related to their nonparticipation. In the early years of the revolution, basic policies in sports were development of public sport, but in recent years, emphasis has been on the development of athletics sports. Perhaps the size of the sport arena, non-recruitment of physical education specialist for specialized posts has been the reasons for these results. These findings are consistent with the findings of Palm and Baumann (2002) [1].

The last factor in this variable associated with reluctance to sports is the weakness caused by the loss or embarrassment and shame. Perhaps this factor is a result of lack of sports skills or putting athletes in different age groups different from their ability. In the discussion of the characteristics of organized sport and physical activity initiatives for older adults in Sweden, the research done by Ericson and Geidne (2023) [19]. Balancing between limitations and attractions (motivations) has caused the application of this activity and selection among other activities. Many people turn to sports because of the social benefits of sports, especially in their free time. Leisure sport is not a specific

sport program, but a social mode of existence of sport. So, we think of leisure sports as non-competitive physical recreation that people use their free time to participate voluntarily in a free form with relaxed emotions in a relaxed environment. Therefore, people need to overcome limitations and interest in these activities based on their attractions or incentives.

After studying each variable, it can be said that people in the sample indicate that factors related to their nonparticipation originate from the various native culture of the country. This situation is seen more in driving variable and deterrent obstacles. In the environmental variables, restrictions caused by organizers, planning by physical education departments, social and living conditions and high cost participation in leisure activities can be the reasons for these variables.

To mention the limitations, it should be clarified that the sample size and its specific demographics may not be fully generalizable to the entire Iranian population. Secondly, our reliance on self-reported data through surveys may be susceptible to potential biases. Additionally, the study design focused on few single geographical locations in Iran, limiting the generalizability of our findings to other contexts. Finally, there might be other unobserved factors influencing sports participation that were not captured by our research.

5. Conclusion

It seems that different groups of people express those obstacles are the most effective factors in their disinterest and then social and cultural factors. In past years, fiscal policy has had a great effect on national sport. Poor sports culture in community as well as lack of

institutional support from various departments and agencies are restrictions that can be free from internal factors. Some personal factors like lack of confidence and skills in activity are related to public awareness or other driving factors. With changes in society culture through the media and officials planning and raising public awareness about the benefits of sport activities, the willingness and interest of the people to participate in sport activities (Physical Activity Council) can be increased. Developing sports activities via local communities and establishing sports groups in neighborhoods in various cities as well as in schools and education departments, universities, municipalities and other related institutions could lead to positive social interactions with sports fields. Many people lose equal and equal participation grounds due to having social or cultural differences, but the suitability of one of these cases with the quality of programs and also having values can create a combination to overcome these cultural challenges.

At the beginning of the new century, constantly stressing the importance of physical activity in improving the quality of social life, and interdisciplinary researches in the field of health and health issues have found its rightful place and principle. At the same time, politicians by establishing closer cooperation between the theory and practice of basic and applied research in sports and other social factors, take positive steps to new measures in the management of exercise.

According to the researches of our country, advertising and promotion of sports activities, arranging life schedule and regular implementation of sports activities take place under the shadow of proper structuring and planning of subordinate officials, which

requires the same regular support as providing. Financial, material and human resources should be accompanied by good management.

The other solution is close cooperation between the plans and programs that have international aspects to peoples around the world to better understand exercise and sports activity and their role. By specifying the reasons for non-participation in various classes, it can be suggested that people should be familiar with the weaknesses or factors that exert pressure on them from the outside until they can increase their tendency to exercise.

Conflict of interest

The authors declared no conflicts of interest.

Authors' contributions

All authors contributed to the original idea, study design. Conceptualization, M.A., F.M. H., A.V.M.; methodology, M.A., A.V. M.; investigation, M.A.; writing- original draft preparation, M.A., F. M.H., A.V.M.; review and editing, F.M.H., A.V.M.; All authors have read and agreed to the published version of the manuscript.

Ethical considerations

The authors have completely considered ethical issues, including informed consent, plagiarism, data fabrication, misconduct, and/or falsification, double publication and/or redundancy, submission, etc.

Data availability

The dataset generated and analyzed during the current study is available from the corresponding author on reasonable request.

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