

## Integration of practical solutions and theory to improve the motivation of workers' sports participation

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**Abstract:** This research aims to integrate practical and theoretical solutions to increase motivation for sports participation among workers. The study employed a cross-sectional and correlational design, focusing on the statistical population of employees at Iranol Oil Company in Tehran in 2019, which consisted of 890 individuals. Based on Karjesi and Morgan's table, 261 participants were selected using an available sampling method. The research utilized tools for measuring motivation for sports participation (Gill et al., 1984), cognitive regulation of emotion (Garnefsky and Kraij, 2006), and feelings of joy (Argill and Lowe, 1990). Structural equation analysis was employed to test the research hypotheses. The findings indicated that the model had a good fit. Specifically, in the final model, the standard path coefficients for adaptive and maladaptive cognitive emotion regulation on sports participation motivation were 0.17 and -0.40, respectively. This suggests that the skill of cognitive emotion regulation (a practical strategy) plays a significant role in the relationship between feelings of vitality (a theoretical approach) and motivation for sports participation. The developed model for sports participation motivation serves as a foundational tool for creating practical programs aimed at enhancing participation in sports among various groups. Additionally, implementing interventions to teach individuals emotion regulation strategies—along with fostering changes in cognition and behavior—can promote self-regulation and subsequently increase sports participation. Finally, efforts to enhance societal vitality represent a theoretical solution to reduce maladaptive emotional regulation, thereby fostering greater motivation for sports participation.

**Keywords:** : practical solution, sports participation motivation, theoretical solution.

## 1. Introduction

Physical and sports activities play a crucial role in promoting human health, as they enhance metabolic activity and cardiovascular functions while improving psychological well-being (Parra, Aron, Amadori, and Miosi, 2020). Recent studies have demonstrated a reciprocal relationship between participation in sports activities and psychological well-being (Rigel, Vidra, and Gill, 2014). Aminnejad, Zaydabadi, Hambooshi, and Khojasteh (2019) conducted a study investigating the structural relationships between sports mindfulness, cognitive emotion regulation, and competitive anxiety among athletes. The findings revealed a significant inverse relationship between sports mindfulness and athletes' competitive anxiety. Additionally, Maqsoodi's research (2017) indicated that among the cognitive emotion regulation strategies, only the strategy of refocusing on planning was able to positively predict sports success. Furthermore, the results of this thesis demonstrated that adaptive emotion regulation skills had both positive and maladaptive effects on participation in sports activities.

In the study by McCormick et al. (2019), a positive relationship was found between emotional regulation and the motivation to participate in sports. Additionally, the findings from Hemti Velandani (2013) indicated that cognitive strategies for emotion regulation not only influence the formation of sports identity but also affect the motivation for sports participation among non-athletes and employees. Further research by Ahn et al. (2020), Jang et al. (2018), and Kim and James (2019) also explored the relationship between physical activity, participation in sports, and happiness.

Given these insights, we can discuss the benefits of engaging in sports activities by understanding how practical and theoretical solutions relate to the motivation for sports participation. Based on this understanding, we can propose educational programs aimed at promoting sports involvement. Athletes, whether professional or amateur, represent a crucial foundation of sports, which is why much research has focused on the factors that create favorable conditions for their performance and enhance their motivation (Nicolas, 2021). Furthermore, this focus on motivational factors

would be incomplete without considering their theoretical aspects (Kerer and Stirling, 2019).

Psychological components are considered central concerns in the field of sports, as they play a crucial role in predicting both performance and participation in sports activities, as well as in designing programs to enhance these aspects (Stambolova and Samuel, 2020). Additionally, how individuals express themselves, experience happiness, and manage their emotions is a significant societal concern. This issue has emerged as a psychological and sociological reality, highlighting that individuals who do not express their emotions positively and interactively within their communities may face psychological problems, including depression (Saraji, 2015).

To address this, engaging in sports activities is recommended as one of the best and healthiest ways to release emotions and maintain overall health. This approach is particularly important for all segments of society, especially employees and workers. Research has indicated a relationship between participation in sports activities and the quality of life among Iranian employees and workers (Makfi Diba, Amirpour, and Mehri, 2017). This issue is especially critical for workers, as approximately 10 million people in our country belong to the working class (Mardpour, 2017). Furthermore, this demographic can significantly contribute to the cultural, social, political, and economic development of the country, as well as help achieve the government's lofty goals.

Thus, the role of sports and physical activities is essential for enhancing self-confidence and responsibility among workers, as well as for promoting their overall participation in social activities. Therefore, the current research aims to improve the participation of Iranol oil workers in sports activities by integrating practical and theoretical solutions and their components. This approach seeks to provide a comprehensive perspective and develop coherent policy packages to present to officials and responsible organizations in this field.

## 2. Materials and Methods

The current study employed a descriptive and correlational design, with the statistical population consisting of all employees of Iranol Oil Company

in Tehran in 2019, totaling 890 individuals. From this population, 261 participants were selected using the available sampling method, as determined by the Karjesi and Morgan table. The research utilized several tools, including the Sports Participation Motivation Scale (Gill et al., 1984), the Cognitive Regulation of Emotion Scale (Garnefsky and Kraij, 2006), and the Joy Scale (Argill and Lowe, 1990). To test the research hypotheses, structural equation modeling was employed.

In compliance with ethical standards, a consent letter was prepared outlining the general purpose of the research. Participants were required to read the consent form, and if they agreed to participate, they completed the research consent form. The participants were assured that their personal information would not be misused in any way. Some participants expressed interest in receiving the results of their questionnaire responses; therefore, a report interpreting the results was provided to them in accessible language. Additionally, participants were informed about the confidentiality of the questionnaires and their responses.

Due to the restrictions and challenges posed by the COVID-19 pandemic, the questionnaires were distributed using the Press Line software. Following consultations with the managers of Iranol Oil Company, the questionnaires were sent online to them, and the managers subsequently distributed them to the workers. Each worker voluntarily completed the questionnaires.

#### Research tools:

Questionnaire on Motivation to Participate in Sports Activities by Gill et al. (1984): This questionnaire aims to assess the motivational factors influencing individuals' participation in educational and sports environments. Developed by Gill, Cross, and Huddleston in 1984, the instrument consists of 30 items organized into 8 sub-scales. Respondents indicate their level of agreement using a 5-point Likert scale, ranging from 5 points for "completely important" to 1 point for "completely unimportant."

The mean scores derived from the sub-scales are used to prioritize the motivational factors of the participants. Shafizadeh (2006) investigated the

exploratory structure validity and internal consistency of this questionnaire, confirming its validity. The analysis revealed a Cronbach's alpha coefficient of 0.83, indicating strong internal consistency.

An examination of the sub-scales showed varying alpha values: the friendship sub-scale had the lowest alpha value of 0.37, while the preparation sub-scale had the highest at 0.75. Other alpha coefficients for the sub-scales were as follows: success (0.46), energy drain (0.57), group orientation (0.67), skill improvement (0.42), situational factors (0.43), and entertainment (0.49). Additionally, the Physical Activity Motivation Questionnaire developed by Frederick and Ryan (1993) was used to evaluate the criteria of this questionnaire, yielding a reliability coefficient of 0.66.

Sense of Vitality by Argyle and Low (1990): This questionnaire, developed by Argyle and Low in 1990, consists of 29 items. Each item includes four statements, scored as follows: the first statement receives a score of 0, the second a score of 1, the third a score of 2, and the fourth a score of 3. The total score ranges from 0 to 87, with higher scores indicating greater vitality.

To assess the reliability and validity of the scale, Argyle (2001) conducted a study with a sample of 142 Iranian men and 227 Iranian women aged 18 to 53. Participants completed the 25-item Oxford Happiness Inventory, the Eysenck Personality Inventory, and the Beck Depression Inventory. The examination of the internal consistency of the Oxford Happiness Inventory revealed that all 29 items had a strong correlation with the total score, with a Cronbach's alpha of 0.91 for the entire scale. These findings indicate that the Oxford Happiness Inventory possesses appropriate validity and reliability for measuring happiness in Iranian society.

Various studies have also validated this scale. For example, Argyle and Lowe (1998) found a Cronbach's alpha of 0.90 among 347 subjects, while Farnheim and Webronik (1999) reported an alpha of 0.87 with 101 subjects. Nouri (2002) also found a Cronbach's alpha of 0.84 with a sample of 180 subjects. In Iran, Alipour and Noorbala (2007) found a reliability coefficient of 0.93 with 101 participants.

Additionally, it is worth noting that some references to studies from 2005 reflecting on this scale were misattributed, as the relevant research validating the Oxford Happiness Inventory was published in 2007 in the journal *Andisheh and Behavare*.

Cognitive regulation of emotion Garnevsky and Kraij (2006)

Cognitive Regulation of Emotion Questionnaire (Garnevsky and Kraij, 2006): This 18-item instrument assesses cognitive regulation strategies in response to threatening and stressful life events, using a five-point scale ranging from 1 (never) to 5 (always). The total score relates to several subscales, including:

1. Numerical Importance
2. Positive Refocusing
3. Acceptance
4. Refocusing on Planning

These subscale scores are divided by 10 (the number of items). Additionally, the scores for compromised strategies and the total scores for self-blame, other-blame, focus on thought/rumination, and catastrophizing are obtained by exponentially dividing by 8 (the number of subjects).

The alpha coefficients for the subscales of this questionnaire range from 0.71 to 0.81. The reliability coefficients, measured by the retest method with a 14-day interval, were reported to be between 0.48 and 0.61 (Abdollahi et al., 2013).

Self-regulation strategies in this context can be viewed along a continuum of cognitive coping, which is divided into two types of coping strategies:

- More Compromised Strategies (positive/efficient)
- Less Compromised Strategies (negative/ineffective) (Volko, Wang, and Baller, 2011).

In Iran, the alpha coefficients for the subscales of this instrument have been reported to range from 0.62 to 0.91. The reliability coefficients, using the retest method with a one-week interval, ranged from 0.75 to 0.88 (Abdollahi et al., 2013). Furthermore, the validity and reliability of this tool have been confirmed through its nine sub-factors in Iranian culture, with Cronbach's alpha for the subscales ranging from 0.76 to 0.89 (Besharat and Bezazian, 2014).

### 3. Results

In statistical analysis, it is necessary to check the general situation of the collected data. For this purpose, central indices such as mean and dispersion indices such as standard deviation have been used.

Table 1: Description of research variables based on descriptive indicators

Variable	Average	standard deviation
The motivation of sports participation	۱۰۱/۹۸	۳۳/۱۸
Feeling cheerful	۹۳/۸۶	۲۶/۸۲
Adaptive emotion regulation	۲۵/۰۱	۹/۸۵
Maladaptive emotion regulation	۱۴/۸۱	۸/۵۵

In Table 1, the mean and standard deviation of the studied research variables, including motivation for sports participation, feeling of vitality, adaptive emotion regulation, maladaptive emotion regulation, are stated.

After describing the studied sample based on the demographic variables and describing the research variables, in the following, the research hypotheses were tested based on the analysis of structural equations.

Table 2: Test of normality of data distribution



variable	curvature	Elongation	Distribution
The motivation of sports participation	-۰/۴۷	-۱/۲۷	normal
Feeling cheerful	-۰/۲۱	-۱/۲۲	normal
Adaptive emotion regulation	-۰/۴۸	-۱/۰۴	normal
Maladaptive emotion regulation	-۰/۵۵	-۱/۰۹	normal

The findings related to the normality test of data based on skewness and kurtosis can be seen in Table 2. Klein (2015) suggests that in causal modeling, the distribution of variables should be normal. He suggests that the absolute value of the skewness and elongation of the variables should not exceed the absolute value of 3 and 10, respectively. According to Table No. 4-6, the absolute value of skewness and kurtosis of all variables and their components is lower than the values proposed by

Klein (2015); Therefore, the premise of causal modeling, i.e. the normality of a single variable, is maintained. Also, the results of Mahalanobis test at the level of 0.001 showed that the assumption of multivariate normality is also valid. Although the violation of the assumption of the normality of the distribution of variables in samples larger than 200 people, it has been stated that it has no significant effect on the results of the research and is negligible (Pethazor and Shmelken, 2013).

Table 3: Correlation matrix of research variables

Variable	۱	۲	۳	۴
1. Adaptive emotion regulation	۱			
2. Maladaptive emotion regulation	*-76/0	۱		
3. Feeling cheerful	*69/0	*-78/0	۱	
4. The motivation of sports participation	*79/0	*84/0	*81/0	۱

significance at the 0.001 level

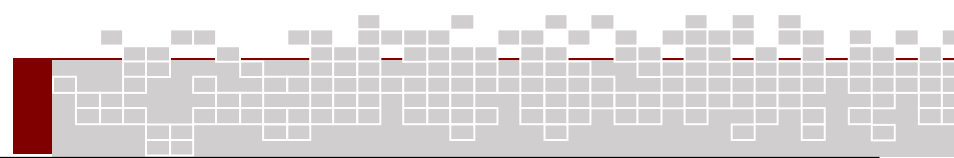
Since the basis of model analysis is the correlation matrix, Pearson's correlation coefficient was used to check the relationships between variables before modeling the research model (Table 3). As can be seen in the above table, the motivation to participate in sports has a positive correlation with compatible emotion regulation (0.79), a sense of vitality (0.82) and a significant negative correlation with incompatible emotion regulation (-0.84).

#### 4. Discussion and Conclusion

Based on the results of the present research, a significant relationship was observed between cognitive regulation of emotion and motivation to

participate in sports. Specifically, the direction of this effect aligned with the correlation coefficient: an increase in the use of positive cognitive regulation strategies led to an increase in motivation to participate, while the use of negative strategies resulted in a decrease in motivation.

These findings resonate with studies by Padilla and Andres (2021), Torperkar and Ribeiro Soriano (2020), Maqsoodi (2017), Hemti Velendani (2011), Pritchard et al. (2019), and McCormick et al. (2019), all of which indicated that individuals with higher emotional self-regulation and emotional stability tended to be more active. The present study suggests a positive relationship between adaptive cognitive emotion regulation skills and motivation to



participate in sports, implying an implicit alignment with these earlier works.

Moreover, Maqsoodi's (2017) research highlighted that among cognitive emotion regulation strategies, only the strategy of refocusing on planning could positively predict sports success. In contrast, the current study found that adaptive emotion regulation skills affect sports participation both positively and negatively. This broadens the understanding of Maqsoodi's findings, demonstrating that not only refocusing on planning but all adaptive strategies play a role with varying effects.

Furthermore, the current findings align with those of McCormick et al. (2019), who identified a positive relationship between emotional regulation and motivation for sports participation. This research also expands on Hemti Velendani's (2013) perspectives by showing that cognitive strategies of emotion regulation influence not just the formation of sports identity but also the motivation for sports participation among non-athletes and workers.

The research findings indicate a significant relationship between the feeling of vitality and motivation to participate in sports. Specifically, an increase in feelings of vitality correlates with an increase in motivation to participate. These results align with previous studies by Mohammadi et al. (2015), An et al. (2020), Jang et al. (2018), and Kim and James (2019).

However, the current research introduces a novel perspective that has not been extensively explored in previous studies. While earlier research primarily focused on the relationship between physical activity, sports participation, and vitality, the causal role of vitality in promoting sports participation had not been thoroughly examined. For instance, Kim and James (2019) found that individuals engaging in light, moderate, or vigorous physical activities during their leisure time experienced lower levels of stress, depression, and anxiety compared to those leading sedentary lifestyles, and they reported feeling more energetic.

Additionally, Jang et al. (2018) noted that individuals motivated by pleasure, vitality, physical health, and social interaction were more likely to

participate in sports activities. The current study expands on these findings by demonstrating that enthusiasm can also enhance motivation for sports participation among workers. This is particularly interesting because it challenges the common belief that participation in sports activities solely contributes to increased cheerfulness. Instead, the results suggest that cheerfulness, or enthusiasm, can also drive continued participation in sports. Thus, the present findings indicate that enthusiasm significantly boosts motivation for participation in sports activities among workers.

The sample for this study was limited to employees of Iranol Oil Company, which may not provide a sufficient representation of the broader population. Therefore, while the findings can be generalized to the target population, caution should be exercised when applying these results to other groups.

During the sampling and distribution of questionnaires, the researcher faced challenges due to the COVID-19 pandemic, which affected the implementation of educational processes and the dissemination of surveys.

To effectively apply the findings of this research, it is recommended that organizational managers implement sports programs as a strategy to enhance workplace success. Incorporating sports activities into employees' work schedules could promote physical fitness and overall well-being. Additionally, organizing sports competitions with other organizations could foster a sense of camaraderie and enjoyment among employees.

By taking a comprehensive view of these factors, it becomes evident how social characteristics in the workplace can enhance both internal and external motivation among employees. This, in turn, can lead to increased organizational commitment and greater job success within the sports sector.

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## تلفیق راهکارهای عملی و تئوری بر ارتقای انگیزه مشارکت ورزشی کارگران

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**چکیده:** این پژوهش با هدف، تلفیق راهکارهای عملی و تئوری بر ارتقای انگیزه مشارکت ورزشی کارگران انجام شد. طرح این پژوهش مقطعی و از نوع همبستگی بود و جامعه آماری پژوهش حاضر کلیه کارکنان شرکت نفت ایرانول شهر تهران در سال ۱۳۹۹ به تعداد ۸۹۰ نفر تشکیل دادند، که از میان آنها، تعداد ۲۶۱ نفر بر اساس جدول کرجسی و مورگان با روش نمونه‌گیری در دسترس انتخاب شدند. در این پژوهش از ابزارهای انگیزه مشارکت ورزشی (گیل و همکاران، ۱۹۸۴)، تنظیم شناختی هیجان (گارفنسی و کرایچ، ۲۰۰۶) و احساس نشاط (آرگیل و لو، ۱۹۹۰) استفاده شد. همچنین به منظور آزمون فرضیه‌های پژوهش از تحلیل معادلات ساختاری استفاده شد.

یافته‌های پژوهش نشان داد که مدل از برازش مناسبی برخوردار بود. بر این اساس، یافته‌ها نشان داد که در مدل نهایی، ضریب مسیر استاندارد، تنظیم شناختی هیجان سازگاران و ناسازگاران بر انگیزه مشارکت ورزشی برابر با ۰/۱۷ و ۰/۴۰- بود و به همین سبب، مهارت تنظیم شناختی هیجان (راهکار عملی) در رابطه میان احساس نشاط (راهکار تئوری) با انگیزه مشارکت ورزشی معنادار بود. نتیجه‌گیری: با استفاده از نتایج حاصل از مدل تدوین شده انگیزه مشارکت ورزشی، سنگ بنایی برای ایجاد برنامه‌های کاربردی جهت بهبود گرایش به مشارکت ورزشی در اقشار مختلف مردم است. همچنین، انجام مداخلات جهت آموزش افراد برای یادگیری راهبردهای تنظیم هیجان با تغییر در شناخت و رفتار جهت نبل به خودتنظیمی بیشتر یک زمینه عملی برای افزایش مشارکت ورزشی است. در نهایت، تمرکز بر افزایش نشاط جامعه راهکار تئوری برای کاهش تنظیم هیجانی ناسازگاران است که به موجب آن، رشد انگیزش مشارکت ورزشی به بار می‌آید.

**واژه‌های کلیدی:** راهکار عملی، انگیزه مشارکت ورزشی، راهکار تئوری.

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**دریافت:** ۰۲ فروردین ۱۴۰۲

**پذیرش:** ۲۶ خرداد ۱۴۰۲

**انتشار:** ۰۵ مرداد ۱۴۰۲



این نماد به معنای مجوز استفاده از اثر با دو شرط است یکی استناد به نویسنده و دیگری استفاده برای مقاصد غیرتجاری.