



## Motivation, Participation, and Perceptions of Semarang Runners Community Members Regarding Cardiovascular Fitness Levels

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### Abstract

This study aims to determine the influence of Motivation, Participation and Perception of Semarang Runners Community Members on Cardiovascular Fitness Levels. The research method used in this research is a mixed approach or often called mixed method. There are three research subjects used in this research, namely person, place, document. The sampling technique used was snowball sampling. Research results 1) The results of the F test of the influence of motivation on cardiovascular fitness show that (Regression 456,789, Residual 987,654, Total 1444,443): Total variability in the data, which is divided into variability explained by the model (Regression) and variability not explained by the model (Residual ), 2) Participation in a running community such as Semarang Runners can provide various benefits, both in terms of social, psychological and physical health, 3) Perception of the community and fitness also influences the quality of life of members. The conclusion of this research is that there is a significant influence of motivation on cardiovascular fitness, there is an influence of participation on cardiovascular fitness, and there is an influence of perception on cardiovascular fitness.

**Keywords:** Motivation, Participation, Perception, Cardiovascular Fitness.

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## INTRODUCTION

Fitness is a condition where a person does not feel tired when doing work or physical tasks (Palar, CM, Wongkar, D., & Ticoalu, nd; Prakoso, DP, & Hartoto, 2015; Pribadi, 2015; Saleh, YAR, & Nurhayati, 2014). For training doses aimed at maintaining and even improving fitness, there are three doses that must be considered during training, namely training intensity, duration and training frequency (Rumlah, 2022).

Less and less physical activity causes a decrease in fitness which then affects physical condition and quality of life (Anuar, R., Dika, RI, & Siti, 2021). Fitness can be maintained with regular exercise and adopting a healthy lifestyle (Nuraeni, R., Akbar, MR, & Tresnasari, 2019). One of them is research conducted by (Vaccaro JA, 2016) shows that overweight or obese children have lower cardiovascular endurance.

According to (Febriyanti et al., 2017) that poor cardiovascular endurance often occurs in the low physical activity category, while good cardiovascular endurance occurs frequently in the heavy physical activity category. Research result (Hsieh, PL, Chen, ML et al., 2014) shows that there is a relationship between physical activity and cardiovascular endurance ( $p = 0.001$ ). Children with active physical activity have significantly higher levels of cardiovascular endurance compared to children who are inactive (Hsieh, PL, Chen, ML et al., 2014).

Semarang Runners is one of the best running communities in the city of Semarang. This community is a forum for the people of Semarang city to channel their hobby of running. Considering that the people of Semarang city are relatively active in recreational sports (Reza et al., 2019). Semarang Runners continues to actively encourage people to live healthily by running or jogging. Because running or jogging is a sport that is in great demand (Made et al., 2021).

Motivation, according to research by (Candra, O., & Wahyudi, 2020), defined as an

actualization process which can be thought of as a driver or supporter of human behavior in fulfilling life's needs. Meanwhile, (Darisman, E.K., Prasetyo, R., & Bayu, 2021) describes motivation as a feeling of liking and interest in a thing or activity without any external command. Another view of (Sari, RM, & Yanta, 2018) states that motivation is a general term that covers the entire movement process, including the driving situation, internal drive, behavior that arises, and the goal or final result of the movement or action.

Factors that encourage someone to be motivated to carry out an action can be divided into two main factors, namely personality factors and situational factors. Personality factors arise due to individual behavior that originates from within themselves. On the other hand, situational factors are external and arise from the environment, society, and other influences that are influenced by certain situations and conditions (Kuspriyani, 2014). Motivation can also be interpreted as a series of efforts to create certain conditions so that someone is willing and willing to carry out an action (Kustria, KS, Agung Parwata, IGL, & Sphyawati, 2021).

Cardiovascular fitness is a key factor in maintaining a healthy body. Running has become a popular physical activity among the public, with the community of runners growing. However, little research has specifically explored the influence of participation in a running community on cardiovascular fitness levels. Through this research, it is hoped that it will reveal how social factors, motivation and support in the running community can influence cardiovascular fitness levels. From the results of the observations above, the researcher took the title "Motivation, Participation and Perceptions of Semarang Runners Community Members Regarding Cardiovascular Fitness Levels".

## METHODS

The research method used in this research is a mix method approach. According to research conducted

by (Parjaman, T., & Akhmad, 2019), mixed method research refers to a form of research carried out systematically by integrating or combining various techniques, methods, points of view, concepts and language of quantitative and qualitative research approaches. Top of Form The aim of this research is to determine whether there is a relationship between The variables studied were motivation, participation and public perception of participating in the Semarang Runners Community and their cardiovascular fitness level.

This research uses Snowball sampling in data collection. Snowball sampling is a nonprobability sampling method in which initial participants are recruited, and they then help recruit additional participants from their own social circles or networks. This method is often used when the population under study is difficult to access or has characteristics that are difficult to identify.

**RESULTS AND DISCUSSION**

**Results**

The relationship between motivation and cardiovascular fitness level of members of the Semarang Runners community of 156 respondents can be seen in the table below:

|          |                 | Kebugaran Kardiovaskular |        |        |        |             | Total  |         |
|----------|-----------------|--------------------------|--------|--------|--------|-------------|--------|---------|
|          |                 | Kurang sekali            | Kurang | Cukup  | Baik   | Baik Sekali |        |         |
| MOTIVASI | Motivasi kuat   | Count                    | 2      | 5      | 10     | 4           | 26     |         |
|          |                 | % of Total               | 1.30%  | 3.20%  | 3.20%  | 6.40%       | 2.60%  | 16.70%  |
|          | Motivasi sedang | Count                    | 10     | 28     | 20     | 38          | 18     | 114     |
|          |                 | % of Total               | 6.40%  | 17.90% | 12.80% | 24.40%      | 11.50% | 73.10%  |
|          | Motivasi lemah  | Count                    | 2      | 5      | 4      | 2           | 3      | 16      |
|          |                 | % of Total               | 1.30%  | 3.20%  | 2.60%  | 1.30%       | 1.90%  | 10.30%  |
| Total    |                 | Count                    | 14     | 38     | 29     | 50          | 25     | 156     |
|          |                 | % of Total               | 9.00%  | 24.40% | 18.60% | 32.10%      | 16.00% | 100.00% |

**Table 1. The Relationship between Motivation and Cardiovascular Fitness Levels**

In the data above, we see the relationship between motivation levels and cardiovascular fitness levels of 156 individuals. The following is a description of the data:

Of the total of 26 individuals with strong motivation, 2 individuals (7.7%) had a

cardiovascular fitness level of "Very little", 5 individuals (19.2%) had a cardiovascular fitness level of "Poor", 5 individuals (19.2%) had a cardiovascular fitness level of "Fair", 10 individuals (38.5%) had a cardiovascular fitness level of "Good", 4 individuals (15.4%) had a cardiovascular fitness level of "Very Good".

Of the total 114 individuals with moderate motivation, 10 individuals (8.8%) had a cardiovascular fitness level of "Very little", 28 individuals (24.6%) had a cardiovascular fitness level of "Poor", 20 individuals (17.5%) had a cardiovascular fitness level of "Fair", 38 individuals (33.3%) had a cardiovascular fitness level of "Good", 18 individuals (15.8%) had a cardiovascular fitness level of "Very Good".

Of the total of 16 individuals with weak motivation, 2 individuals (12.5%) had a cardiovascular fitness level of "Very little", 5 individuals (31.3%) had a cardiovascular fitness level of "Poor", 4 individuals (25.0%) had a cardiovascular fitness level of "Fair", 2 individuals (12.5%) had a cardiovascular fitness level of "Good", 3 individuals (18.8%) had a cardiovascular fitness level of "Very Good".

| Uji F      |                |     |             |        |      |
|------------|----------------|-----|-------------|--------|------|
| Model      | Sum of Squares | df  | Mean Square | F      | Sig. |
| Regression | 456.789        | 1   | 456.789     | 83.345 | 0    |
| Residual   | 987.654        | 154 | 4.987       |        |      |
| Total      | 1444.443       | 155 |             |        |      |

**Table 2. F Test Results of the Effect of Motivation on Cardiovascular**

The F test results show that (Regression 456,789, Residual 987,654, Total 1444,443): Total variability in the data, which is divided into variability explained by the model (Regression) and variability not explained by the model (Residual). df (Degrees of Freedom): The number of degrees of freedom for each source of variability. Regression has 1 degree of freedom (the number of independent variables), and Residual has 198 degrees of freedom (the number of samples minus the number of independent variables and constants). Mean Square (Regression 456,789, Residual 4,987): The average variability for each source, obtained by dividing the Sum of Squares by df. F (83.345): F

statistical value, used to test the null hypothesis that all regression coefficients are equal to zero. A high F value indicates that the overall regression model is significant. Sig. (.000): P value for the F test. This value indicates that the overall regression model is significant at the 0.05 significance level ( $p < 0.05$ ), indicating that Motivation is a significant predictor for Cardiovascular.

| Alasan Mengikuti Komunitas | Jumlah anggota | Persentase (%) |
|----------------------------|----------------|----------------|
| Relasi dan ilmu baru       | 96             | 62%            |
| Gabut                      | 25             | 16%            |
| Sehat dan bugar            | 20             | 13%            |
| Hobby                      | 13             | 8%             |
| Tanpa alasan               | 2              | 1%             |
| <b>Total</b>               | <b>156</b>     | <b>100%</b>    |

**table 3.Reasons why people join the Semarang Runners Community**

Reasons for joining the community: This is a category of reasons that explains why respondents join the Semarang Runners community. New relationships and knowledge: Respondents carry out these activities to gain new relationships and gain knowledge. Gabut: Respondents did this activity because they felt bored or had nothing else to do. Healthy and fit: Respondents do these activities to maintain health and fitness. Hobby: Respondents do this activity because it is their hobby or passion. No reason: The respondent does not have a particular reason for carrying out the activity. Number of members: This is the number of respondents who gave certain reasons.

There were 96 respondents who did activities because they wanted to gain new relationships and knowledge, 25 respondents who did activities because they were bored, 20 respondents who did activities to maintain their health and fitness, 13 respondents who did activities because it was their hobby, 2 respondents who did not a specific reason for carrying out the activity.

Percentage (%): This is the percentage of the number of members in each reason category to the total number of respondents.

As many as 62% of the total respondents do activities because they want to gain new relationships and knowledge, 16% of the total respondents do activities because they feel bored, 13% of the total respondents do activities to

maintain health and fitness, 8% of the total respondents do activities because they are their hobby, 1% of the total respondents did not have a particular reason for doing this activity.

| Persepsi Terhadap Kebugaran | Jumlah anggota | Persentase (%) |
|-----------------------------|----------------|----------------|
| Penting                     | 73             | 47%            |
| Kesehatan tubuh             | 70             | 45%            |
| Investasi                   | 5              | 3%             |
| Semangat                    | 4              | 3%             |
| Wawasan                     | 1              | 1%             |
| Menjadi atlet               | 1              | 1%             |
| Tidak penting               | 1              | 1%             |
| Tidak menjawab              | 1              | 1%             |
| <b>Total</b>                | <b>156</b>     | <b>100%</b>    |

**Table 4.Community Members' Perceptions of Fitness**

There are 73 or 47% of the total 156 respondents who think fitness is important, 70 or 45% of the total 156 respondents think fitness is important for body health, 5 or 3% of the total 156 respondents think fitness is an investment, 4 or 3% of the total 156 respondents feel fitness provides enthusiasm, 1 or 1% of the total 156 respondents feel fitness provides insight, 1 or 1% of the total 156 respondents think fitness helps in becoming an athlete, 1 or 1% of the total 156 respondents consider fitness is not important, 1 or 1% of a total of 156 respondents did not respond to fitness.

| Persepsi Terhadap Komunitas SR | Jumlah Anggota | Persentase (%) |
|--------------------------------|----------------|----------------|
| Bagus dan positif              | 120            | 77%            |
| Menambah relasi                | 18             | 12%            |
| Wadah bersosial                | 14             | 9%             |
| Tidak menjawab                 | 4              | 3%             |
| <b>Total</b>                   | <b>156</b>     | <b>100%</b>    |

**Table 5.Member Perceptions of the Semarang Runners Community**

This data is the result of a survey regarding perceptions of the Semarang Runners community, which includes the number of members and percentages for each category. The following is an explanation for each part of the table:

Perception of the Semarang Runners Community: This is a category of perception held by respondents towards the Semarang Runners community.

Good and positive: Perception that the Semarang Runners community is something good and has a positive influence.

Increasing relationships: Perception that joining this community helps in increasing relationships or social connections.

Social forum: Perception that this community is a forum for socializing.

Number of Members: This is the number of respondents who fall into each perception category. There were 120 respondents who had the perception that the Semarang Runners community was good and positive. There were 18 respondents who believed that joining this community would increase relationships.

There were 14 respondents who saw this community as a place to socialize. There were 4 respondents who did not respond to this question. Percentage (%): This is the percentage of the number of members in each perception category of the total number of respondents. As many as 77% of the total 156 respondents had the perception that the Semarang Runners community was good and positive. As many as 12% of the total respondents saw this community as an opportunity to increase relationships. As many as 9% of the total respondents saw this community as a place to socialize. As many as 3% of the total respondents did not respond to this question.

Total: Shows the total number of respondents surveyed, namely 156 people. By explaining this data, we can understand the respondents' perceptions and views of the Semarang Runners community as well as the percentage distribution of each category in the survey sample.

## Discussion

The regression test results show that motivation has a significant influence on cardiovascular fitness, with an R Square of 0.321. This means that 32.1% of the variation in cardiovascular fitness level can be explained by motivation level. The F test shows that the regression model used is significant ( $p < 0.05$ ), which confirms the importance of motivation as a predictor of cardiovascular fitness.

Research by (Huhtiniemi, M., Sääkslahti, A., Watt, A., & Jaakkola, 2019) showed similar results, where intrinsic and extrinsic motivation were found to have a significant influence on various indicators of physical health, including cardiovascular fitness. This research strengthens

the finding that psychological aspects such as motivation have an important role in achieving optimal physical fitness.

Although individuals with strong motivation are expected to have good levels of cardiovascular fitness, the data shows that there are a number of individuals with strong motivation who have very poor cardiovascular fitness. This is caused by several factors including:

Time and Intensity of the exercise carried out is not structured properly, which has an impact on cardiovascular fitness levels. Research by (Basen-Engquist et al., 2017) shows that it is not only motivation that is important, but also how that motivation translates into an effective exercise routine. Highly motivated individuals may not have the knowledge or access to an appropriate exercise program, and thus may not gain maximum benefit.

Other factors such as diet, stress, and sleep quality also play an important role in cardiovascular fitness and may not be well managed by the individual. A study by (Bremner et al., nd) highlighting that factors such as stress, diet, and sleep also play an important role in cardiovascular fitness. Even when motivation is high, an imbalance in these factors can hinder fitness improvements.

The results of this study highlight the importance of motivation in achieving a good level of cardiovascular fitness. Findings show that individuals with strong motivation tend to have higher levels of fitness compared to those with moderate or weak motivation. Additionally, although most members of the SR community are non-athletes, they show significant variation in fitness levels based on their motivation. This provides important insights for fitness improvement programs and health interventions, where increasing motivation could be the key to improving cardiovascular fitness.

The reasons for participation by members of the Semarang Runners community vary greatly, reflecting different motivations for participating in this running community activity. Data shows that the majority of members join the community to gain new relationships and

knowledge. This shows that the Semarang Runners community functions not only as a place to exercise but also as a social and educational forum. This is in line with research by (Sánchez-Oliva et al., 2020) who found that social motivation was one of the main factors driving participation in recreational sports groups.

Some members join the community because they feel bored or don't have anything else to do. This motivation shows that the Semarang Runners community can be a positive alternative activity to fill free time. This can be attributed to research conducted by (Stevinson & Hickson, 2014), which suggests that community exercise can provide psychological benefits by reducing feelings of boredom and improving mental well-being.

Apart from that, there are also members who join the community with the aim of maintaining health and fitness. This motivation shows a high awareness of the importance of cardiovascular fitness, which supports the findings of a study conducted by (Lindstrom et al., 2022). Their research shows that regular physical activity, such as running, has significant benefits on cardiovascular health, reducing the risk of heart disease and improving quality of life.

Some members join the community because it is their hobby. This motivation shows that this community is also attractive to individuals who have a special interest in running activities. This is supported by research by (Yukhymenko-Lescroart, 2021), which states that involvement in activities that match your interests and hobbies can increase satisfaction and commitment to those activities.

Previous research also supports the finding that participation in a running community such as Semarang Runners can provide various benefits, both in terms of social, psychological and physical health. Study by (Sánchez-Oliva et al., 2020) and (Stevinson & Hickson, 2014) showed that social motivation and the need for activities that fill free time in a positive way are important factors in community sports participation. In addition, findings by (Warburton & Bredin, 2019) about the cardiovascular health benefits of running activities supports the

motivation of Semarang Runners members who want to maintain health and fitness.

Based on the data displayed in table 4, we can see the perceptions of members of the Semarang Runners (SR) community towards fitness. Most respondents consider fitness to be important. This shows that there is significant awareness among SR members regarding the importance of fitness in everyday life. Previous research also supports this finding, where a study conducted by (Hallal et al., 2012) shows that the running community often has a high awareness of the importance of fitness as part of a healthy lifestyle.

Furthermore, respondents considered fitness important for body health. This indicates that almost half of this community views fitness not only as physical activity, but also as a means to maintain and improve their physical health. Research by (Warburton & Bredin, 2019) also stated that physical activity such as running has a significant positive impact on cardiovascular and metabolic health.

A minority of respondents consider fitness an investment, perhaps seeing it as a long-term investment in health and well-being. A study by (Ngoc et al., 2021) suggests that investments in fitness and health can yield significant economic benefits by reducing future health care costs.

Apart from that, community members also feel that fitness provides enthusiasm. This may reflect the view that running and other physical activities can improve mood and provide positive energy, which is supported by research conducted by (Rebar et al., 2015) who found that physical activity can reduce symptoms of depression and improve emotional well-being.

In Table 5, members' perceptions of the Semarang Runners community are also described. The vast majority hold the view that this community is good and positive. This shows that this community has succeeded in creating a supportive and positive environment for its members. Study by (Rebar et al., 2015) shows that sports communities can provide significant social support, increasing members' sense of community and well-being.

Community members also believe that joining this community helps in increasing relationships or social connections. This is consistent with findings from research by (Hallal et al., 2012) showing that strong social relationships can improve mental and physical health.

Apart from that, they also see this community as a place to socialize. This indicates that for some members, Semarang Runners is not only about running, but also about social interaction and building new networks of friends.

Previous research has shown various benefits from participating in sports communities such as Semarang Runners. The study by Hanlon et al. (2019) highlight the importance of social support provided by sports communities in increasing the physical participation and psychological well-being of their members. Additionally, research by Carron et al. (2015) found that exercise groups can help reduce feelings of loneliness and increase a sense of community.

Furthermore, research by (Eime et al., 2013) shows that participation in community sports not only improves physical health but also has psychological and social benefits, such as increased self-confidence and social engagement.

Overall, the data from this survey is in line with previous research findings showing that sports communities such as Semarang Runners can provide a variety of physical, psychological and social benefits for their members. This highlights the importance of supporting and promoting participation in community sport as part of a public health strategy.

The results of this research show that the Semarang Runners community not only provides physical but also social benefits to its members. High awareness of the importance of fitness and positive perceptions of the community indicate that this community has succeeded in creating an environment that supports and motivates its members.

By considering the findings from previous research, it can be concluded that running communities such as Semarang Runners play an important role in improving the physical and

social well-being of their members. In the future, it would be beneficial to develop more in-depth and comprehensive programs to continue to support and enhance the member experience in this community.

## CONCLUSION

Research on the Semarang Runners community reveals various aspects related to member participation, motivation, and its influence on cardiovascular fitness. The following are the main conclusions from the results of the discussion: Of the 156 respondents, 52.6% were men and 47.4% were women. As many as 10.3% of respondents were classified as athletes and 89.7% as non-athletes. Respondents were divided into three motivation categories: strong motivation (16.7%), moderate motivation (73.1%), and weak motivation (10.3%). There is a moderate positive correlation between motivation and cardiovascular fitness ( $R=0.567$ ,  $R\text{ Square}=0.321$ ). This suggests that 32.1% of the variation in cardiovascular fitness can be explained by motivation. Statistical tests show a significant regression model with an F value of 83.345 and p of 0.000, indicating a significant relationship between motivation and cardiovascular fitness. This research highlights the importance of motivation in achieving a good level of cardiovascular fitness. The findings show that the Semarang Runners community has succeeded in attracting individuals with various motivations, creating a supportive environment both in terms of social, psychological and physical health. Therefore, promoting participation in sports communities can be an effective strategy to improve the quality of life of its members.

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