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Self-rated health of physical function, physical role, and bodily pain are related to general health in the fun-run community

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Abstract

Fun run (FR) activities have become popular in recent years because the perpetrators themselves create the fun in FR. This research aims to see to what extent FR affects physical function (PF), role physical (RP), and bodily pain (BP) and how the three contribute to general health (GH). The respondents were 76 people who were members of 11 FR communities in South Sulawesi. Data was collected using the Quality of Life SRH questionnaire which was distributed through the community. The Quality of Life SRH questionnaire is related to physical health (PH) with 21 questions, divided into 4 large groups, namely PF 10 questions, RP 4 questions, BP 2 questions, and GH 5 questions. The results show that PF is correlated with GH at 0.367, RP is correlated with GH at 0.333 and BP there is a negative correlation of -0.026. This research concludes that there is a correlation between PF, RP, and GH.

Keywords: Fun run, physical function, physical role, bodily pain, general health, and physical health

1. Introduction

FR is a running activity that is carried out in a relaxed and enjoyable manner, whether with competition or not ^[1]. The joy of fun can be created by FR participants themselves, making it as exciting as possible, such as photo sessions, and costumes according to the specified theme, route, or at a pace that can be determined by themselves. FR participants can come from all ages. There is no official stipulation for the distance for FR, but usually, the minimum distance covered is 5 km, for circuit running it can be done on highways, mountains, or inter-city running. FR don't always compete what is popular is that whoever completes the distance in a running event will get a medal.

Running is one of the most popular forms of aerobic exercise ^[2], cost-effective and easy to do ^[3]. The positive effect of running on improving physical fitness has been widely confirmed. Research has shown that high-intensity interval training and sustained resistance training can significantly increase an individual's aerobic fitness and improve body composition ^[4]. FR can be used as a form of low-intensity aerobic exercise. FR has become a popular activity among the public. This not only shows significant effectiveness in improving aerobic fitness but also plays an important role in fostering a positive exercise culture.

Running is a basic movement that is common in daily human activities. It is not uncommon for some people to make running a routine activity for their body's health, even making this sport a hobby. The sport of running is becoming increasingly popular, accompanied by the establishment of running communities in various cities, which aim to become a forum for members who have the same hobbies and goals. In Indonesia, many FR communities have been formed. The number of recreational sports communities that have emerged has become a current trend in society. This phenomenon has a good impact if the motivation and goals for exercise are consistent and continuous, likewise the people in South Sulawesi

Exercise done in appropriate doses will affect physiology ^[5] someone, especially PH. A person's exercise tolerance can vary based on their biological adaptations so exercise can be said to be appropriate and effective.

WHO recommends physical activity (PA) be done 150 minutes at moderate intensity or 75 minutes at high intensity per week [6]. If FR is carried out according to WHO recommendations, then FR will be able to increase a person's PH.

In this research, the author will study the PH of FR perpetrators using Quality of Life Self Rated Health (SRH) [7], so that FR practitioners can measure for themselves whether the FR they do has a positive effect on their PH, as well as to see the influence of PF, RP and BP on GH.

2. Materials and Methods

The research respondents were FR runners who carried out

regular running activities and were members of the FR community in South Sulawesi. The total number of research respondents who filled out the questionnaire was 76 people from various communities in 11 cities in South Sulawesi. In this study, the SRH Quality of Life questionnaire was used via Google form which was distributed through the community. The Quality of Life SRH questionnaire taken was related to PH with a total of 21 questions, which were divided into 4 large groups, namely PF 10 questions, RP 4 questions, BP 2 questions, and GH 5 questions.

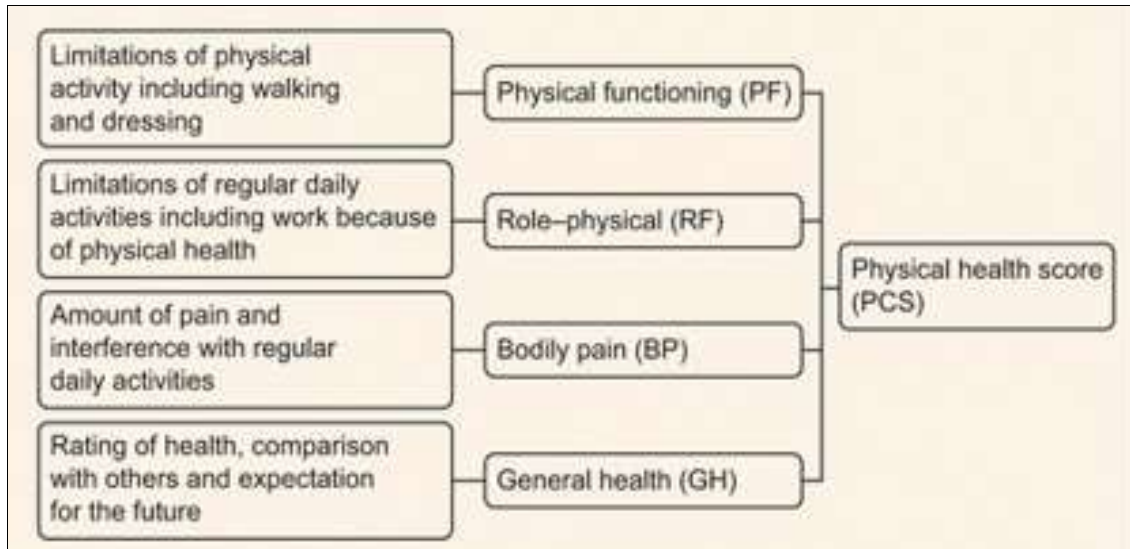


Fig 1: Quality Of Life SRH PH

This PH data was obtained by measuring how one felt during the last 4 weeks.

3. Results & Discussion

Based on the results of data collection using the Quality of Life SRH questionnaire which was distributed through the community, the following results were obtained:

Table 1: Characteristics of Respondents

Variable	variance	N	Min	Max	Mean	Median
Age		76	14	49	24.66	23.00
Height		76	150	180	165.45	165.50
Weight		76	44	87	59.25	57.00
Systole		76	100	140	119.78	120.00
Diastole		76	60	100	79.87	80.00

Table 1 shows data on respondent characteristics from 76 research respondents, for minimum age 14, maximum 49, mean 24.66 and median 23; minimum height 150, maximum 180, mean 165.45 and median 165.50; minimum body weight 44, maximum 87, mean 59.25 and median 57; minimum systole 100, maximum 140, mean 119.78 and median 120; and minimum diastole 60, maximum 100, mean 79.87 and median 80.

Table 2: Descriptive Statistics Data

Variable	N	Min	Max	Range	Sum	Mean	SD	Variance
P.F	76	15	30	15	1874	24.66	3.97	15.72
RP	76	4	8	4	534	7.03	1.30	1.68
BP	76	2	10	8	318	4.18	1.99	3.94
GH	76	7	25	18	1335	17.57	3.05	9.32

Table 2 is descriptive statistical data from 76 respondents, for minimum PF 15, maximum 30, range 15, sum 1874, mean 24.66, SD 3.97 and variance 15.72; Minimum RP 4, maximum 8, range 4, sum 534, mean 7.03, SD 1.30 and variance 1.68; BP minimum 2, maximum 10, range 8, sum 318, SD 1.99 and variance 3.94; Minimum GH 7, maximum 25, range 18, sum 17.57, SD 3.05 and variance 9.32.

Table 3: Data Correlation

		P.F	RP	BP
GH	Pearson Correlation	0.367	0.333	-0.026
	Sig (2 tailed)	0.001	0.003	0.822

*. Correlation is significant at the 0.05 level (2-tailed).
 **. Correlation is significant at the 0.01 level (2-tailed).

Table 3 shows the correlation data between PF, RP, and BP with GH. PF correlates with 0.367, RP has a correlation of 0.333, and BP shows a correlation of -0.026. This shows that PF and RP are correlated with GH, but in BP there is a negative correlation with GH.

An active lifestyle is associated with reduced causes of death, coronary heart disease, hypertension, and stroke. This disease is also the main cause of most chronic diseases if the body gets used to insufficient PA, which if continued will cause a significant reduction in quality of life. PA done regularly significantly improves mental health, and self-confidence, and gives healthy independent humans, and quality of life [8]. FR is one sport that can increase PA [9, 10].

Many factors contribute to the growth of FR, including physical and psychological health benefits [11, 12], low cost, and requires little technical skill. The health benefits of running are very broad, including preventing obesity,

hypertension, dyslipidemia, type 2 diabetes [11], reduction of cardiovascular disease, and all-cause mortality [13].

Researchers will discuss the influence of PF, RP, and BP on GH. PF is a self-assessment about the PA that a person is capable of, including the ability to lift objects, and the ability to walk. RP is an accumulation of the PA carried out and how big its influence is. BP is the pain caused after doing FR and its effect on daily activities carried out. GH is an assessment of perceived health after doing FR.

PA carried out regularly will prevent a decrease in PF. Declines in functional capacity or PF, quality of life, and increased risk of age-related diseases, disability, and death can be offset or slowed by adopting a more physically active lifestyle. International guidelines from WHO recommend that older adults engage in at least 150 minutes of moderate-intensity PA per week [14, 15] at least 75 minutes of vigorous aerobic exercise per week, or an equivalent combination of both. Additionally, adults should engage in muscle-strengthening activities of moderate intensity or higher at least two days a week [16].

Lack of PA is recognized as one of the main risk factors for overweight, obesity, non-communicable diseases (NCDs), and chronic conditions. This disease has been identified as the fourth leading risk factor for global mortality at 6% [17]. PA appears to have a low priority in health. It is important to provide a better understanding of PA so that strategies to achieve effective PH can be implemented. Lack of PA in adolescents likely contributes to global health problems, including cardiometabolic and mental health disorders [18].

By increasing PF through cardiovascular fitness and muscle strength, it is hoped that in old age, a person can maintain independence, increase PA levels, and prevent disability. Additionally, regular PA and fitness have also been shown to be beneficial in reducing illness and death rates from cardiovascular disease, diabetes, hypertension, and obesity. additional benefits include improved bone density and quality of life. Exercise, which is part of PA, includes planned, structured, and repetitive movements carried out specifically to maintain or improve physical fitness. Most of the research on the effects and benefits of PA on fitness comes from resistance training performed during adolescence [19].

Running is one of the most popular forms of PA [20, 2]. Some research on the pleasure of running does not focus entirely on achievement, but rather on achieving predetermined targets, and some runners who have just achieved a new target (exceeding the previous target) will feel pain in the body as a pleasant thing [21]. Runners should enjoy the effects of pain on the body, which automatically describes the reflective experience after running [22]. BP is a post-running pleasure and is an effort to evaluate oneself after running [21]. Some researchers state that in FR it is not enough to only take into account the momentary pleasure experienced while running, because after running BP will appear [23-25].

FR, as a form of low-intensity cardiovascular endurance training, has become a popular activity. Not only has it demonstrated significant effectiveness in improving cardiovascular endurance, but it also plays an important role in fostering a positive exercise culture [3]. Moving on from this, the community encouraging PA and providing access to safe activity experiences will increase the possibility of increasing PA. Several community-based sports programs have shown benefits and have been declared feasible and acceptable to various groups [26]. PA interventions designed and implemented by the community have the potential to be maintained after group exercise and be effective in increasing

and encouraging PA [27, 28]. The outdoor environment and associated infrastructure features are claimed to be important investments to encourage regular PA [29]. Therefore, a friendly 'active environment' design, has been recommended as one strategy to increase PA [30].

FR is a sporting event carried out in groups that presents itself as a social group that aims to create a healthier and happier population so that FR communities emerge to support frequent running events. Existing research has explored the impact of FR on physical and mental well-being, as well as mechanisms that may alter physical activity behavior. FR becomes a platform for individuals who want to become 'runners', with the support of the people around them and the long-term effect is that FR becomes a habit [31].

The goal of FR when viewed in the long term is GH, namely living a healthier and happier life. This research shows that many physical changes are occurring, but several previous studies have not only looked at physical changes but also changes in social identity and changes in long-term PA behavior [32].

4. Conclusions

Based on research that has been carried out, it is stated that of the 76 FR respondents in South Sulawesi, it shows that PF and RP are correlated with GH, while BP is negatively correlated with GH. This states that if FR is done regularly, then PF and RP will influence GH, and the higher the GH level, the lower the BP will be felt.

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