

## Street Mini 4WD: The New Face of Recreational Sports

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**Abstract:** Street Mini 4WD is a new type of game that is played outdoors with various obstacles such as rocks, sand, clay, grass and others using Mini 4WD which is generally played on indoor tracks and guide sticks. Initially, Street Mini 4WD was popular in Italy, which then spread to several countries, including Indonesia, where it began to be played regularly at various events and public spaces. In Indonesia itself, Street Mini 4WD is played by various groups and the younger generation from various cities in Indonesia with various goals, such as getting used to healthy living, reducing smoking habits, filling free time or seeking personal pleasure. Is this just a momentary passion or is it an activity that will develop sustainably? This paper discusses the background and currently available literature regarding the interesting phenomenon of the Street Mini 4WD game: its impact on physical health and psychological satisfaction and looks at the negative impacts that may arise from this game. From this review, Street Mini 4WD shows that this game, played in an interesting way, can reach many people and trigger positive changes in active movement behavior. The Street Mini 4WD game can help someone increase physical activity and exercise as long as the player's interest can be maintained.

**Keywords:** street mini 4wd, physical activity, recreational sports

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### INTRODUCTION

"Street Mini 4WD" is a racing sport activity that combines modeling with physical running. The athlete, in this sport, runs and drives a model car called "mini 4WD". The model car is driven using "a guide stick". An athletes then run alongside their models, controlling them and making them turn left or right using the guide stick. To overtake the other runners in different type of races, pilots must tune their model car setup by changing the wheels, gears, weights, and so on... improving the stability and the speed of their cars (Street Mini 4WD n.d.).

Although the Mini 4WD cars were produced in Japan, the street races have obtained a lot of interest in Italy and several countries in the world including Indonesia where racers run for many years in this kind of competition as well as in the usual on-track ones. The street Mini 4WD racing in Italy employs a regulation based on the official Tamiya race regulation, but there aren't restricted to only Tamiya models and Grade-Up Parts. Street Mini 4WD frees the racer to make modifications according to his wishes as long as he uses optional parts that comply with regulations and provide safety for the user. This is where the racer's role is to show the creativity they have and apply it to their racing car. Mini 4WD street racing is inspired based on the Japanese manga "Dash!Yonkuro".

Unlike Mini 4WD which is generally played on a special track that requires less active play indoors, Street Mini 4WD requires racers to physically explore an outdoor environment with unique tracks and obstacles in the form of gravel, grass, sand, and other materials that encourage social interaction among racers and active physical movement. Given the Street Mini 4WD's relatively new status, this paper aims to evaluate the health impacts of the Street Mini 4WD.

The World Health Organization (WHO) as a world institution that focuses on health defines health is "a state of complete well-being from physical aspects, mental aspects and social aspects and not just being free from disease or weakness" (Rudnicka et al. 2020)(WORLD HEALTH ORGANIZATION EIGHTY-NINTH SESSION Economic Commission for Europe Economic Commission for Latin Organisation for Economic 1992). Positive brain research alludes to a subset of brain research that looks at how people accomplish more fulfilling lives. A central variable in this field is well-being, which is for the most part conceptualized as a multi-faceted concept that incorporates joy and consolation, as well as "eudaimonic" (i.e., important) life encounters (Raney 2023).

Most global diseases are currently dominated by non-communicable diseases (NCDs), such as ischemic heart disease, stroke and diabetes, which rank high as causes of death. These non-communicable diseases tend to be diseases whose main cause is poor behavior and lifestyle factors. For example, in addition to unhealthy eating patterns, poor physical activity and sedentary behavior have been shown to play an important role in increasing the risk of non-communicable diseases. Lack of physical activity due to lazing causes 6%–10% of the burden of NCDs, 9% of premature deaths, and 5.3 million deaths in 2008. Despite these worrying statistics, one in four adults is not active enough, and more 80% of the world's youth population is less physically active.[4,6-8] Nowadays, there are increasing efforts to utilize technological developments in sports to provide incentives for people to participate in physical activity, such as using physical activity trackers (Fitbit, Jawbone, Microsoft Band) or mobile phone activity tracking applications, which allow setting individual goals in body health, direct feedback of the results of the activities performed, checking the progress made and participation

in social communities. In street mini 4WD, racers usually use applications such as Strava or Polar to measure the number of steps taken, distance traveled, calories expended, and other features that can also measure their abilities and set targets to be achieved. In street mini 4WD, racers usually use applications such as Strava or Polar to measure the number of steps taken, distance traveled, calories expended, and other features that can also measure their abilities and set targets to be achieved (Akseer et al. 2020)(Wang and Wang 2020).

## **STREET MINI 4WD AND PHYSICAL ACTIVITY**

Street Mini 4WD tends to encourage racers to follow a track with various obstacles from the start line to the finish line. In several types of races, racers are required to pass through obstacles as quickly as possible to achieve the fastest time (time attack) which is played individually, in pairs, or groups as a relay. In other races, racers are required to run with 2 or more racers to compete simultaneously and reach the finish line first.

Although there were large variations in the physical activity effects of Street Mini 4WD racers depending on how long they played or the distance they ran, there appeared to be a positive influence on the amount of physical activity experienced. Some of these observations have implications for public health planning. This seems to indicate that the Street Mini 4WD could very well be used in the future to target sedentary or overweight individuals.

## **PSYCHOLOGICAL HEALTH BENEFITS**

Currently, there is no research on Street Mini 4WD on a person's psychological well-being, and there is no specific research on Street Mini 4WD that focuses on students' educational outcomes at school. Research into the future Street Mini 4WD needs to be done. It aims to examine more closely the specific benefits of Street Mini 4WD to provide insight into how this game can truly benefit one's mental health.

Based on short interviews conducted with racers in various regions in Indonesia, it was stated that they felt joy when playing street Mini 4WD, reduced stress increased enthusiasm for life, and of course a feeling of fitness. Apart from that, the hope of staying healthy in old age makes Mini 4WD racers enthusiastic about running with a Min4WD. Therefore, the Street Mini 4WD is a physical activity that involves running, coordination of movements, and proprioception. Street Mini 4WD athletes have the opportunity to learn technical basic concepts about how model cars work: a Mini 4WD can be tuned both aesthetically and mechanically, providing always a way to give new ideas to learn new concepts and develop a real challenge with oneself.

## HAZARDS OF MINI 4WD

When Street Mini 4WD is played on the road, hazards can arise when pedestrians and vehicle drivers are distracted by Street Mini 4WD. Therefore, to minimize possible risks, the Mini 4WD game is better if played in an environment that is not too busy with other road users or public transportation such as sports fields, city parks, sidewalks, and other places that can minimize the detrimental.

Basically street mini 4wd is a combination of running and mini 4WD. Therefore, someone who is going to play street mini 4WD must also prepare themselves to run so that there are no problems that endanger their body. The street mini 4WD game does not pose a big risk either for the racer or the surrounding environment. It's just that when racers rarely do sports and regular physical activity, doing street mini 4WD without good physical preparation can cause various problems in the racer's body. These problems such as:

1. Leg muscle cramps, Muscle cramps can occur suddenly while running. This is characterized by the part of the leg that is cramping becoming tense and stiff, which is caused by sudden or excessive use of the muscles so that the muscles experience unwanted contractions. Leg cramps in Street Mini 4WD racers can also be caused by racers not warming up and stretching properly before the Street Mini 4WD game starts.
2. Muscle and joint injuries, Excessive use of muscles and joints can trigger injuries that can occur at any time. The muscle and joint areas most often affected when Street Mini 4WD are the knees and ankles.
3. Dehydration, When Street Mini 4 WD covers long distances, this is the same as medium distance running or long distance running. When a racer covers a long distance, it is estimated that a runner will sweat as much as 0.5 to 1 liter per hour. If excessive sweating is not balanced with adequate fluid intake, it can trigger dehydration.

Problems that can also arise due to poor facilities include, among others:

1. Skin irritation, Excessive sweating and constant friction while running can cause skin irritation. Especially in the armpits, thighs, and legs. Inappropriate shoe conditions and materials that are too hard can also irritate the skin of the feet.
2. Blackened toenails, Running long distances without comfortable and appropriate shoes can put pressure on the toenail area. This situation continuously causes the toenails to always touch the toe area of the shoe, resulting in poor blood circulation and making the toenails black.(health-problems-that-can-appear n.d.)(Kakouris, Yener, and Fong 2021)(Kakouris, Yener, and Fong 2021)

Despite the low risk of injury, the Street Mini 4WD can encourage those starting this sport to stay fitter in everyday life, thanks to the idea of healthy

competition which is one of the foundations of sporting activity. In the future, activities could be promoted to direct those starting out in Street Mini 4WD to carry out exercises (warm-up, training) to carry out in preparation for Street Mini 4WD events.

## CONCLUSIONS AND RECOMMENDATIONS

Street Mini 4WD is an effective way to improve physical activity by motivating the players to engage in walking, running, and even jumping as part of the race. Street mini 4WD is also known to make someone feel happy and reduce stress.

On this basis, the use of street mini 4WD is highly recommended to increase physical activity and maintain mental health. Apart from that, with the positive impact caused by the Street Mini 4WD, it is hoped that there will be more in-depth research regarding the Street Mini 4WD because currently there is no research on the Street Mini 4WD.

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