# Interpretation of Marathon from the Perspective of Psychology

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Abstract: In recent years, the marathon has become increasingly popular and popular all over the world. The number of people participating in the marathon is increasing, and the people who participate in this sport have a long-lasting motivation to participate. This article adopts research methods of literature and logical analysis, through the analysis of the psychological state of the people who run marathon from attention, participation, persistence, and finally development to the urban marathon enthusiastic runners at each stage of the growth process, which is for the majority of amateur marathons. The scientific exercise of runners and physical and mental health provide a theoretical basis, and at the same time provide a reference for the healthy development of the Chinese mass marathon.

Keywords: marathon, psychology, motivation

#### 1. Introduction

Marathon is popular all over the world because of its low cost of participation, large amount of exercise, and it is not restricted by venues and other factors, and is widely loved by people. According to statistics from relevant departments, whether it is a marathon runner or an elderly person dancing square dance, the number of participants in the two sports events has accounted for the top two of all sports participants, apparently becoming the main body of China's existing national fitness population. In 2018, China has held 310 marathons of various levels certified by the Athletics Association, with 3.2 million participants; in 2011, the two figures were 220,000 and 400,000 respectively[1]. It is even more difficult to sign up for a marathon event. Although these hot blowouts are the result of the combined forces of sports associations, city governments, commercial organizations, and sports users, it is undeniable that the number of people participating in running is increasing day by day, and steady growth is the foundation of its prosperity and development. What prompted them to think from the beginning that they could change into flat shoes and run on their legs when they went out. They clenched their teeth and insisted that they were the "outsiders" of the marathon. They evolved to be fully equipped and took time to participate in marathons everywhere. A "professional runner" who uses basic skills and tactics? The analysis of the psychological state of marathon runners at different stages of exercise should become the topic of current marathon research.

# 2. The initial motivation for participating in the marathon---herd behavior

The herd effect, also known as the band float effect, refers to when individuals are under the influence of the group: they will doubt and change their opinions, judgments, and behaviors when they are guided or exerted pressure, and change in a direction consistent with the majority of the group. This is what people usually call "follow the trend". In 1952, the "line segment recognition experiment" designed and implemented by the American psychologist Solomon Asch proved the existence of the herd phenomenon. The crowd will consciously or unconsciously use the opinions of the majority to make judgments. In this process of psychological changes and information acceptance, it shows a tendency to adopt behaviors consistent with most people. The specific manifestation is: a certain consistent group behavior can form "pop" and be accepted, such as "pop songs" "popular music", "new book craze", etc.; the mode that can regulate people's acceptance behavior and make it a acceptance habit[2]. The same is true for audiences who have not participated in running marathons. They consider

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the phenomenon of many people around to participate in marathon running as a popular model, and consciously or unconsciously use the behavior that most people have already "participated" as a countermeasure, and accept hints, make a judgment, and finally accept the behavior pattern of "running a marathon"-consistent with most people. The herd effect itself is not good or bad. The quality of its effect depends on the things and occasions where the herd behavior is produced. The specific performance is as follows: one is the positive effect of the herd with a positive effect; the other is the negative effect of the herd with a negative effect. The positive herd effect can stimulate each other's emotions and make brave actions, which is conducive to establishing a good social atmosphere and enabling individuals to achieve psychological balance, and vice versa. This is similar to queuing with the crowd. If you are ranked behind the "good result" team, you can enjoy the benefits of speed and convenience, but if you queue the wrong team, the consequences will be completely different. This kind of "follow the crowd" mentality of marathon participants is a positive conformity effect with a positive effect to quickly enjoyed all the benefits of running to runners.

# 3. Motivation for participating in the marathon --- Perseverance

The reason why a marathon exercises people's willpower is understood from the traditional sense, and the key is persistence. That is, in the case of physical strength and willpower close to overdraft, use long-term repetitive mechanical stimulation to increase the perception threshold to produce adaptation: can run this time and distance, and when inhibition occurs, use a new repetitive mechanical stimulation: run more Longer time, longer distance. This repeats, over time, the runners will increase their willpower and their running ability. Roy Baumeister, the first psychologist to systematically observe and measure the limit of willpower, put forward a theory in the "self-loss" theory that is contrary to the popular traditional understanding of "persistence to increase willpower": "We only have limited willpower. Overuse will decrease [3]."

Kelly Magnigel also believes that willpower has a physiological limit. If the brain and body are tired or injured, willpower will inevitably be weakened. In the process of running a marathon, runners have reached a state where their physical strength is close to being overdrawn and their willpower is exhausted. At this time, the activity of the brain's automatic control system is significantly reduced, and the desire and ability to enhance willpower are almost lost. It can only deplete physical strength and willpower, without the possibility of enhancement. At the same time, Kelly Magnigel believes that physical fitness can improve willpower, but it is not so-called "persistence", but through long-term repetitive exercises to increase "heart rate variability" to increase willpower [4]. The purpose of force heart rate variability refers to the change in the difference of the heartbeat cycle from time to time, which is the difference between the heart rate at a certain moment and the heart rate at the next moment. In the experiment to test the correlation between "exercise process" and "heart rate variability", the heart rate of the subjects accelerated when stimulated. At this time, the subject's willpower does not affect the heart rate acceleration value; people with strong willpower, The heart rate can quickly recover and maintain a lower or more normal value, so the heart rate variability is high; and people with poor willpower, the heart rate will always remain at a high value, and the heart rate variability is low. Therefore, the higher the amount of heart rate variability, the greater the elasticity of the heart's adjustment, and the state can be adjusted at any time as needed.

According to Kelly Magnigel's theory, because people participate in long-term continuous exercises such as marathons, their bodies are strengthened while their heart rate variability is increased, which enhances the willpower of runners and encourages them to persist in this sport. As the time of participation increases, participants not only increase their willpower, but also gradually learn about relevant professional knowledge and improve their athletic ability and skills. It is the virtuous circle of active sports psychology that strengthens the physical fitness and the increase of willpower, stimulates the runner's potential athletic ability, and promotes the development of participants from junior runners to marathon enthusiasts.

### 4. Participate in the marathon and enjoy the motivation---peak experience

"Peak experience" was put forward in 1943 by American psychologist Abraham Harold Maslow in the paper "The Theory of Human Motivation"[5]. It refers to the short-lived, short-lived experience that people feel when they achieve self-realization after their basic needs are met in the process of pursuing self-realization. An open-minded, blissful experience is a satisfying and perfect experience that tends to the top, transcends time and space, and transcends oneself. During the peak experience, people will

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have a kind of existential cognition. This experience seems to be integrated with the universe. It is a moment of self-affirmation, a state of transcendence, selflessness, and selflessness. "Peak experience" appears at the top of Maslow's hierarchy of needs [6]. It is the subjective feeling of human transcendence experience after self-realization, resulting in suddenness, intensity, perfection of feeling, and universality of existence. The identity of the structure and the shortness of retention are the characteristics. It is not difficult to see that junior runners who exercise regularly can also experience the smooth state brought about by running a marathon. Compared with all kinds of ball events that must have a variety of complex skills and have wins and losses, running a marathon, which is a repetitive and continuous exercise event, is more likely to trigger participants to enter a smooth state. Peak experience mostly occurs in intermediate and advanced runners with a certain level of running. They enter a smooth state again and again from running, experience a high sense of competence and control, and surpass the smooth state from time to time, and experience the peak moment fleeting the super perfect runner state of "Heaven and One". This is one of the reasons why many runners join the ranks of marathon running, they will be happy and tireless, and become a firm "horse-racing fan".

# 5. Participating in marathon sports behavior motivation --- sports addiction

In 1987, British scholar De Coverley Veale first proposed the concept of "exercise dependence", that is, exercise addiction [7]. According to the impact of participating in sports on the physical and emotional health of exercisers and on normal work and life, it can be divided into active exercise addiction and negative exercise addiction. Later, foreign scholars developed the "sympathetic arousal hypothesis" of Thompson and Blanton [8]; the "endorphin hypothesis" of Christie and Chester; proposed by Hamer et al. "Mood regulation mode"[9]; Theories such as "cytokine hypothesis" proposed by Marker Hamer et al. Tian Juqun et al [10]. proposed the mutual influence between skeletal muscle adaptation mechanism and exercise dependence from the aspect of skeletal muscle adaptation mechanism. Among them, the endorphin hypothesis, which focuses on biological mechanism research, and the emotional regulation model theory, which focuses on research from the perspective of individual psychology, have received support from many researchers.

It should be more scientific to analyze the active sports addiction of marathon runners by using the endorphin hypothesis and the emotional regulation model theory. According to relevant studies, the human body will secrete endorphins when engaging in medium-to-high-intensity physical exercise for a long time. If you continue to exercise at medium-to-high intensity for more than 60 minutes, the endorphin in the body can maintain a high level and reach its peak. Marathon exercise can easily induce the exerciser to secrete endorphins. The excitement induced by the combination of endorphins and morphine receptors improves the tolerance to pain, which is equivalent to a natural analgesic and reduces physical pain; the pleasure produced at the same time can adjust bad emotions and make people feel physically and mentally in a state of joy[11]. In terms of the overall physiological functions of marathon runners, it can re-regulate the neuroendocrine system, improve immunity, and improve sleep quality. With the current pace of life accelerating and work and family pressures increasing, the number of people who use exercise to reduce negative emotions and improve mental health is increasing day by day, and their increase continues to enrich this group of active exercise addiction. Runners insist on running for about 30 minutes, and their emotions can be temporarily separated from the stressful life and heavy work, and shifted to paying attention to another thing that is different from the daily routine of work and life. This "emotional transfer" process is "emotional refreshing" "the processing. When the running is over, the negative emotions of the runners are reduced, even to the lowest value. In this state, they return to the original life situation again, which is enough to bear and cope with the new pressure again. Use long-term running to activate the psychological defense mechanism of "emotion transfer" to resolve psychological anxiety and relieve psychological pressure. This emotional regulation mode of conscience cycle is just like "for the anxious people living in the fast-paced and high-stress society of the moment" "Long drought meets the sweet rain", once I try, I don't want to give up.

# 6. Conclusion

With the improvement of our people's overall living standards, people's needs and desires for life have surpassed their physiological and safety needs, and are developing in the direction of social, respect and self-fulfillment needs. At the same time, under the atmosphere of the government's promotion of "National Fitness", participating in marathon sports has easily won the favor of the urban

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mass fitness crowd with the "low threshold" that requires lower sports venues. Once runners participate in this sport, from the perspective of psychological development theory, most of them will grow from junior runners to intermediate and senior runners who want to participate in marathon events to experience transcendence and discover their different values. In the process of growing up, runners will gradually not only pay attention to the effect of running on physical exercise, but also pay attention to the interaction between psychological factors and psychological distance and running. They are concerned about discovering that running a marathon is not only a road to physical fitness, but also a road to a healthy mentality. As for the marathon organizers, it is one of the important factors to promote the marathon on the road of rational development. It is only a matter of time before the emergence of a healthy urban marathon in the future.

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