The Effect of Motivational Self-Talk on Reducing Anxiety in Short-Distance and Middle-Distance Runners

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Abstract

The aim of this study is to examine the effect of motivational self-talk on the anxiety level of short-distance and middle-distance runners. Anxiety, as experienced by the players, particularly before competitions, can have a negative influence on their performance. Motivational self-talk is a psychological intervention technique used to enhance concentration, build self-confidence, and reduce competitive anxiety. The design of the study utilized in this case was a one-group pretest-posttest quasi-experimental study. The sample consisted of 29 athletes from Sekolah Atletik Pajajaran Bandung, who were short-distance and middle-distance runners. Anxiety was quantified using the Sport Anxiety Scale-2 (SAS-2). Treatment was a motivational self-talk training package that was presented in 12 sessions and included the skills of countering, reframing, and affirming. Paired sample t-test of the data showed that motivational self-talk reduced the anxiety level of short-distance ($p < 0.05$) and middle-distance runners ($p < 0.05$). The results of the independent sample t-test showed no significant difference between the two groups ($p > 0.05$), which meant that motivational self-talk affected both of them equally. The study concludes that motivational self-talk reduces anxiety in short- and middle-distance runners and is recommended to be included in general athlete training programs.

How to Cite

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INTRODUCTION

Competitive sports require athletes to have a balance of physical, technical, tactical, and psychological readiness. Athletics, as one of the fundamental sports, requires concentration, speed, strength, and high body coordination, especially in short and middle distance running events. In these events, the final results are often determined by psychological factors such as self-confidence, focus, and anxiety levels (Darisman, Ismawandi, and Sriningsih 2020).

Competitive anxiety is a negative emotional state that can cause disruption in an athlete's movements, such as body tremors and an excessive fear of losing (Georgakaki and Karakasidou 2017). According to (Smith et al. 2006), sports anxiety can be divided into three dimensions: cognitive anxiety (negative thoughts and fear of failure), somatic anxiety (physical reactions such as increased heart rate, sweating, and muscle tension), and concentration disorders (difficulty focusing). If left uncontrolled, anxiety can reduce performance, interfere with concentration, and trigger mistakes in competition (Purnamasari and Novian 2021).

On the other hand, mild anxiety can still have a positive effect by increasing athletes' alertness. However, if the intensity of anxiety is too high, it can actually hinder optimal performance. (Kumbara, Metra, and Ilham 2018). Therefore, anxiety management is an important part of sports psychology. Effective psychological interventions are needed to help athletes control their emotional responses when facing competitive pressure.

One strategy that can be used is self-talk, which is communication between an individual and themselves in the form of words, sentences, or internal dialogue. However, self-talk can be either positive or negative. Positive self-talk, especially motivational self-talk, can increase self-confidence, maintain focus, and reduce negative thoughts (Komarudin 2017). Conversely, negative self-talk often increases anxiety, raises doubts, and decreases performance (Komarudin 2022).

International research has shown the effectiveness of self-talk in overcoming anxiety and improving athletic performance.(Hatzigeorgiadis and Galanis 2017) found in their meta-analysis that self-talk is positively associated with emotional regulation, increased self-confidence, and reduced anxiety. (Latinjak et al. 2023) added that self-talk not only affects cognitive aspects but also has physiological effects that help athletes remain relaxed in competitive situations.

In the Indonesian context, research related to self-talk is still limited, especially in short-distance and middle-distance runners. In fact, these two events require high focus, emotional control, and the ability to cope with pressure. Therefore, this study was conducted to test the effectiveness of motivational self-talk in reducing the anxiety of short-distance and middle-distance runners at the Pajajaran Athletics School in Bandung.

METHODS

This study used a quantitative approach with a quasi-experimental method and a one-group pretest-posttest design. This design allowed researchers to measure athletes' anxiety levels before and after motivational self-talk treatment, so that the changes that occurred could be analyzed empirically.

The population in this study consisted of all short- and middle-distance runners at the Pajajaran Athletics School in Bandung. The sampling technique used was total sampling, whereby the sample size was equal to the population size. The total sample consisted of 29 people, comprising 15 short-distance runners and 14 middle-distance runners.

The instrument used was the Sport Anxiety Scale-2 (SAS-2) developed by (Smith et al. 2006). This questionnaire consisted of 15 items with a 1–4 Likert scale and measured three dimensions of anxiety, namely cognitive anxiety, which included worry, doubt, and negative thoughts; somatic anxiety, which included physiological symptoms such as tension, sweating, and heart palpitations; and concentration anxiety, which included difficulty maintaining focus during training/competition. Somatic, which includes physiological symptoms such as tension, sweating, and heart palpitations. Concentration disorders, which include difficulty maintaining focus during training/competition.

This instrument has been adapted into Indonesian through a process of translation and reliability testing, with a Cronbach Alpha value > 0.7 (Putra and Guntoro 2022).

RESULTS AND DISCUSSION

The purpose of this study was to determine whether there was a significant effect of motivational self-talk on reducing anxiety levels in short-distance and middle-distance runners. In line with the purpose of the study, the data obtained were the results of measurements of

athletes' anxiety levels assessed using the Sport Anxiety Scale-2 (SAS-2) instrument.

Table 1. Paired sample t-test

Group	Mean difference	t	df	Sig. (2 tailed)
Sprinter	-14.077	-4.812	12	0.000
Middle Distance	-17.625	-6.174	15	0.000

Based on **Table 1** the results of the paired sample t-test analysis, there was a significant decrease in the athletes' anxiety levels after being given motivational self-talk treatment (p < 0.05). The decrease was seen in all dimensions of the SAS-2, including cognitive anxiety, somatic anxiety, and concentration disorders.

Tablel 2. Independent sample t-test

	Group	N	Mean	SD	t	Sig.(2 tailed)
Pre	Sprin	13	31,00	6,20	1,429	0,166
	Middle	16	29,31	5,49		
Post	Sprint	13	45,92	5,34	-1,793	0,086
	Middle	16	48,19	4,11		

Tablel 2 shows the results of the independent sample t-test, which indicate no significant difference between short-distance and middle-distance runners (p > 0.05). This means that motivational self-talk has relatively the same effectiveness for both groups of athletes.

The results of this study reinforce previous findings that self-talk is an effective cognitive strategy for overcoming competitive anxiety. (Safitri 2024) explain that positive self-talk can increase self-confidence, maintain concentration, and reduce feelings of anxiety. (Hatzigeorgiadis et al. 2014) in a meta-analysis also state that self-talk contributes significantly to emotional regulation and improved athletic performance.

The decrease in cognitive anxiety in this study shows that self-talk helps athletes change negative thought patterns into positive ones. (Walter, Nikoleizig, and Alfermann 2019) that athletes who more frequently used positive self-talk tended to have lower levels of cognitive anxiety compared to athletes who tended to use negative self-talk. Thus, the countering and reframing techniques used in this study were proven to be able to reduce irrational thoughts related to the possibility of failure in competition.

From a somatic perspective, this study shows that self-talk helps athletes control their physiological responses. This is in line with (Darisman et al. 2020), who stated that cognitive techniques such as self-talk can affect physiological regulation by reducing muscle tension and heart rate. These findings are also in line with the research by (Walter et al. 2019), which links self-talk with increased control over stress responses in sports activities.

The concentration disturbances experienced by athletes also decreased significantly. This is important considering that concentration is a key factor in competitive sports. (Indraharsani and Budisetyani 2018) emphasized that self-talk is effective in shifting attention away from distractions and toward relevant tasks. Through consistent use of self-talk, the athletes in this study were able to focus on running strategies, starting techniques, and maintaining speed, thereby minimizing anxiety that interferes with concentration.

The absence of significant differences between short-distance and middle-distance athletes indicates that motivational self-talk is universal in reducing anxiety, regardless of race characteristics. This expands on previous research findings that generally focused only on specific sports (Tod, Hardy, and Oliver 2015). Thus, self-talk can be widely applied to various sports.

Practically, this motivational self-talk program has several advantages. First, this technique is simple, does not require large costs, and can be done independently by athletes. Second, this program can be easily integrated into regular training sessions. Third, self-talk can function as a long-term psychological skill, where athletes can use it not only in competition but also in daily life to manage stress.

From a theoretical perspective, this study reinforces the theory of emotion regulation in sports psychology, which states that cognitive strategies can influence both the psychological and physiological aspects of athletes (Effendi and Jannah 2019). In addition, this study contributes to enriching the local literature on self-talk, particularly in athletics in Indonesia, where similar studies are still rare.

CONCLUSION

Motivational self-talk has been proven effective in reducing anxiety levels among short- and middle-distance runners at the Pajajaran Athletics School in Bandung. This program can be used as a simple and practical psychological strategy to support athlete development, both mentally and in terms of competition performance.

It is recommended that coaches and athletic trainers integrate motivational self-talk into their regular training programs. Further research can be conducted in other sports, with a larger sample size, and testing its effects on other psychological variables such as motivation, self-efficacy, and concentration.

REFERENCES

Darisman, Eka Kurnia, B. P. Ismawandi, and Wahyu Dewi Sriningsih. 2020. "Hubungan Anatara Mental Toughness Dan Competitive Anxiety Atlet UKM Softball Universitas PGRI Adi Buana Surabaya." Ilmiah ADIRAGA 6(2):10–24.

Effendi, Achmad, and Miftakhul Jannah. 2019. "Pengaruh Pelatihan Self-Talk Terhadap Kepercayaan Diri Atlet Lari 100 Meter." Jurnal Penelitian Psikologi 6(3):1–6.

Georgakaki, Styliani Kyriaki, and Eirini Karakasidou. 2017. "The Effects of Motivational Self-Talk on Competitive Anxiety and Self-Compassion: A Brief Training Program among Competitive Swimmers." Psychology 08(05):677–99. doi: 10.4236/psych.2017.85044.

Hatzigeorgiadis, Antonis, and Evangelos Galanis. 2017. "Self-Talk Effectiveness and Attention." Current Opinion in Psychology 16(d):138–42. doi: 10.1016/j.copsyc.2017.05.014.

Hatzigeorgiadis, Antonis, Nikos Zourbanos, Sofia Mpoumpaki, and Yannis Theodorakis. 2014. "Mechanisms Underlying the Self-Talk-Performance Relationship: The Effects of Motivational Self-Talk on Self-Confidence and Anxiety." Psychology of Sport and Exercise 10(1):186–92. doi: 10.1016/j.psychsport.2008.07.009.

Indraharsani, I. A. Saraswati, and IGAP Wulan Budisetyani. 2018. "Efektivitas Self-Talk Positif Untuk Meningkatkan Performa Atlet Basket." Jurnal Psikologi Udayana 4(02):367. doi: 10.24843/jpu.2017.v04.i02.p12.

Komarudin. 2017. Psikologi Olahraga.

Komarudin. 2022. "Penerapan Psikologi Dalam Meningkatkan Penampilan Atlet." 2(2):65–76.

Kumbara, Hengki, Yogi Metra, and Zulpikar Ilham. 2018. "Analisis Tingkat Kecemasan (Anxiety) Dalam Menghadapi Pertandingan Atlet Sepak Bola Kabupaten Banyuasin Pada Porprov 2017." Jurnal Ilmu Keolahragaan 17(2):28. doi: 10.24114/jik.v17i2.12299.

Latinjak, Alexander T., Alain Morin, Thomas M. Brinthaupt, James Hardy, Antonis Hatzigeorgiadis, Philip C. Kendall, Christopher Neck, Emily J. Oliver, Małgorzata M. Puchalska-Wasyl, Alla V. Tovares, and Adam Winsler. 2023. "Self-Talk: An Interdisciplinary Review and Transdisciplinary Model." Review of General Psychology 27(4):355–86. doi: 10.1177/10892680231170263.

Purnamasari, Ira, and Geraldi Novian. 2021. "Tingkat Kepercayaan Diri Dan Kecemasan Atlet PPLP Jawa Barat Selama Menjalani Training From Home (TFH) Pada Masa Adaptasi Kebiasaan Baru (AKB)." Jurnal Patriot 3(2):203–13. doi: 10.24036/patriot.v3i2.784.

Putra, Miftah Fariz Prima, and Tri Setyo Guntoro. 2022. "Competitive State Anxiety Inventory–2R (CSAI-2R): Adapting and Validating Its Indonesian Version." International Journal of Human Movement and Sports Sciences 10(3):396–403. doi: 10.13189/saj.2022.100305.

Safitri, Siti Nabila. 2024. "Pengaruh Self Talk Positif Terhadap Motivasi Berprestasi Pada Atlet." 2(2):36–43.

Smith, Ronald E., Frank L. Smoll, Sean P. Cumming, and Joel R. Grossbard. 2006. "Measurement of Multidimensional Sport Performance Anxiety in Children and Adults: The Sport Anxiety Scale-2." Journal of Sport & Exercise Psychology 28:479–501.

Tod, David, James Hardy, and Emily Oliver. 2015. "Effects of Self-Talk: A Systematic Review." Journal of Sport and Exercise Psychology 33(5):666–87. doi: 10.1123/jsep.33.5.666.

Walter, Nadja, Lucie Nikoleizig, and Dorothee Alfermann. 2019. "Effects of Self-Talk Training on Competitive Anxiety, Self-Efficacy, Volitional Skills, and Performance." Sports (Basel) 7(6):1–20.