



How to Use Self-Talk in Athletes based on Skill and Gender

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Abstract

This study describes and compares the self-talk application by athletes based on their gender and skill. The method is descriptive-comparative, and the self-talk application by athletes is examined based on their gender and skill. The statistical population includes 450 male and female athletes in the team, individual, Amateur, and professional disciplines in Gorgan city. 370 athletes who met the research requirements willingly participated in this study. The tools include Hardy's Self-talk Questionnaire (2004). Hardy (2004) reported a reliability of 0.94 using Cronbach's alpha method. The present study reliability was obtained 0.94 by Cronbach's alpha method. The findings showed that women use self-talk more than men at the beginning of the competition season and during skill performance. In two periods of time, early in the competition season and during the skill performance, female athletes increase self-confidence and psychological preparation through self-talk because two periods are stressful. Our findings also show that female athletes use more self-talk than men to increase self-confidence, psychological preparation, maintain motivation, remind goals. This explanation is in line with the findings. Men are more likely than women to use neutral self-talk.

Keywords: self-talk, athletes, gender, sport type, skill.

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1. Introduction

Athletes have used Numerous intervention methods recently and, in the past, to improve performance, satisfaction, and personal development. Specific cognitive strategies have been developed to influence and change athletes' mental and psychological patterns positively; These include self-talk, goal setting, imagery, relaxation, and arousal regulation, and they can be valuable and useful for athletes (1). A particular type of intervention method, self-talk, is a strategic method that refers to what a person says aloud or in his mind (2, 3).

Research has shown that athletes use self-talk extensively and unequivocally to increase and motivate and provide physical activity cues (4). In

addition, Zinsser, Bunker, and Williams (2006) stated that self-talk improves and enhances performance by improving skills acquisition, building confidence and self-efficacy, adjusting ineffective habits, and controlling effort (5). In addition, Weinberg and Gould (2003) suggested that athletes use self-talk in a variety of ways (including gaining and learning a new skill, stopping a bad habit, gaining motivation, controlling attention, creating and changing Emotion, and mood, and increasing self-confidence) (6). Hence, self-talk can be used in different situations and for a variety of purposes.

There are many types of self-talk, including positive (with praise), negative (with criticism), neutral, motivational, and instructional. Numerous studies have used different types of self-talk to compare

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their effectiveness on different tasks, situations, and athletes (7). It seems that using positive statements before performing a task increases physical and psychological preparation by facilitating encouragement, motivation, and instructional assistance (5). In addition, positive self-talk has been suggested to reduce anxiety, increase effort, increase self-confidence, build self-awareness, control attention and arousal, and help post-injury rehabilitation (8, 9). Most research has supported the idea that self-talk has a beneficial effect on performance. Positive self-talk was an effective strategy for increasing endurance performance (10) and increased that performance in basketball shooting skills. Positive self-talk is also divided into two types: motivational and instructional. Motivational self-talk facilitates performance by inducing more effort and creating a positive mood and self-confidence.

In contrast, instructional self-talk improves performance by calling for desired actions through focus and strategy (8). Numerous studies have tested the effects of different types of self-talk before sports tasks or competitions and presented conflicting results. Some research has shown that instructional statements are more effective than motivational statements, while other studies have reported other results. The presented research shows that in sports psychology, self-talk is an essential factor in increasing performance, learning, self-confidence, etc. (11). Therefore, self-talk is essential for athletes. Hatzigeorgiadis, Zourbanos, and Theodorakis (2007) suggested that if different self-talk signs have different effects on performance, it is better to use different types of tasks for different functions (12). An essential aspect of forming a clear understanding of the potential practical meanings of self-talk intervention is understanding the nature of self-talk. The nature of self-talk goes back to the last two decades, as described by Van Noord (1984) (13). He believed that, in general, there are many dimensions associated with self-talk, especially in the field of sports. It is better to note that although each dimension is presented separately, there is an inherent overlap between dimensions (14). However, factors such as skill, gender, and sport type (individual or team) affect performance and how it is used. For example, Hardy (2005) showed significant differences in the self-talk application based on gender and sport type. Also, the self-talk application in competition is more than in practice (15).

A literature review found that research has often addressed the effects of self-talk on athletes. Therefore, it is necessary to conduct research that examines self-talk application and how it is used by athletes so that solutions are provided when this factor is not used by athletes or in case of their

misconceptions, so that athletes enhance their mental processes and physical condition. Therefore, the present study seeks to provide a complete description of how athletes use self-talk based on gender, sport, skill, and content.

2. Methodology

2.1. Statistical population and sampling method

The method is causal-comparative, and self-talk application by athletes is compared based on gender, athletes' skill, and the sport type (team and individual). The statistical population included 450 female and male athletes in the team, individual, Amateur, and professional disciplines in Gorgan city. Three hundred seventy athletes who met the research requirements willingly participated in this study.

2.2. Data Collection Method

Self-talk Questionnaire: The tools include Hardy's self-talk questionnaire (2004), which shows how much athletes use self-talk, pre and in exercise, positive, negative and Neutral, open and covert and with one-word and multi-word statements, the self-talk amount and reasons in practice and competition, combined with imagery, self-talk during physical practice and alone, statements similar to self-talk during practice and competition, and the athletes' belief in self-efficacy impact on performance. This questionnaire consists of 36 items in 4 parts. Part 1 contains 4 questions that measure the self-talk duration. Part 2 contains 9 questions that measure the self-talk content. Part 3 contains 12 questions that assess the self-talk performance, and Part 4 examines how to use self-talk and self-belief with 11 questions. The measurement scale in this questionnaire is 9- and 5- points and some questions are assigned percentages. Hardy (2004) reported that The reliability of 0.94 using Cronbach's alpha method. The present study's reliability was 0.86 using Cronbach's alpha method.

2.3. Data analysis method

First, percentage frequency and charts graphs are used to describe participants by gender, period, place, season, provincial and national competition, and experienced competition level. Next, the research variables are described in four parts: first, self-talk application by athletes is described for research participants, then self-talk application is described based on gender (male and female), sports (team and individual), And skills (Amateur and professional). Shapiro-Wilk test was used to determine the data normality. Mann-Whitney and independent t-tests were also used to test the research hypotheses

3. Findings

The participant's results are reported in Table 1 with a percentage frequency by gender, period,

place, season, provincial and national competition, and competition level.

Table 1. Descriptive results

Variables		Frequency (%)
Gender	Male	49.1
	Female	50.9
Sport	Team	44.26
	Individual	55.74
Skill	Amatur	49.18
	Professional	50.82
Duration	Pre practice	45.61
	Post practice	54.39
Place	Sports hall	33.96
	Gym	43.40
	locker room	1
	Class	20.75
Outside the classroom		0
Season	Holidays	40.54
	Pre-season	35.14
	Mid-season	16.22
	Postseason	8.11
Knockout		0
Provincial	Yes	39.34
	No	60.66
National	Yes	25
	No	75

Table 1 shows the reasons for participants' application of self-talk based on the mean and standard deviation. The results show that mood

enhancement, relaxation, and maintaining motivation have the highest mean.

Table 1. Reasons for applying self-talk in practice

	Variable	Min	Max	Mean	Std.
<i>self-talk application in practice</i>	learned skills refinement	1	9	4.88	2.6
	strategy / game / plan refinement	1	9	5.18	2.4
	To strengthen the spirit	1	9	6.13	2.4
	relaxation	1	9	6.11	2.5
	Anger management	1	9	5.22	2.5
	To Maintain or regain focus	1	9	5.77	2.5
	To increase the self confidence	1	9	5.72	2.7
	To Help psychological preparation	1	9	5.77	2.3
	To Cope with difficult situations	1	9	5.67	2.4
	To Maintain or increase motivation	1	9	6.07	2.5
	To Control the effort	1	9	5.48	2.4
	goal Reminder	1	9	5.37	2.9

The results of Table 2 show that relaxation, coping with difficult situations, and controlling the effort have the highest mean.

Table 2. Reasons for applying self-talk in practice competition

	<i>Variable</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Std.</i>
<i>self-talk application in competition</i>	learned skills refinement	1	9	4.27	2.8
	refinement strategy / game / plan	1	9	4.48	2.6
	To strengthen the spirit	1	9	5.40	2.3
	relaxation	1	9	5.83	2.34
	Anger management	1	9	4.90	2.6
	To Maintain or regain focus	1	9	5.20	2.6
	To increase the self confidence	1	9	5.42	2.6
	To Help psychological preparation	1	9	5.70	2.6
	To Cope with difficult situations	1	9	5.66	2.6
	To Maintain or increase motivation	1	9	5.35	2.4
	To Control the effort	1	9	5.66	2.4
	goal Reminder	1	9	5.47	2.5

Table 3 shows the percentage of participants' positive, neutral, and positive self-talk for both male and female athletes.

Table 3. participants' self-talk Content by gender

	<i>Variable</i>	<i>Male</i>		<i>Female</i>	
		<i>Mean</i>	<i>Std.</i>	<i>Mean</i>	<i>Std.</i>
<i>Self talk content</i>	<i>Positive</i>	60.5	34.1	55.8	27.02
	<i>Neutral</i>	35.9	28.3	19.6	16.8
	<i>Negative</i>	23.7	27.3	26.03	19.05

Table 4 shows participants' reasons for self-talk application based on the mean and standard deviation for both male and female athletes.

Table 4. The reason for self-talk application in practice by gender

	<i>Variable</i>	<i>Male</i>		<i>Female</i>	
		<i>Mean</i>	<i>Std.</i>	<i>Mean</i>	<i>Std.</i>
<i>self-talk application in practice</i>	learned skills refinement	4.85	2.8	5.16	2.5
	strategy / game / plan refinement	5.31	2.5	5.06	2.4
	To strengthen the spirit	5.93	2.5	6.33	2.4
	relaxation	6	2.7	6.24	2.2
	Anger management	5	2.9	5.44	2.04
	To Maintain or regain focus	5.50	2.7	6.06	2.3
	To increase the self confidence	4.68	2.9	6.75	2.08
	To Help psychological preparation	4.93	2.4	6.62	2
	To Cope with difficult situations	5.24	2.3	6.10	2.3
	To Maintain or increase motivation	5.14	2.5	7	2.3
	To Control the effort	4.89	2.4	6.06	2.3
	goal Reminder	4.58	3.07	6.17	2.5

Table 5 shows the self-talk mean application alone to refine or learn a skill for male and female combined with imagery, physical exercise, and athletes.

Table 5. self-talk application alone, combined with imagery and physical exercise by gender

<i>Variable</i>	<i>Male</i>		<i>Female</i>	
	<i>Mean</i>	<i>Std.</i>	<i>Mean</i>	<i>Std.</i>

combined with imagery	4.79	2.3	5.46	2.4
combined with physical exercise	4.36	2.4	5.22	1.9
Alone	5.08	2.3	5.33	1.9

Table 6 shows the mean and standard deviation of pre-practice, in practice, post-practice, pre-competition, in competition, and post-competition self-talk application and outside the practice and competition environment in both Amateur and professional groups.

Table 6. self-talk application at different times of the competition or practice by skill

Variable	amateur		Professional		
	Mean	Std.	Mean	Std.	
self-talk application	pre practice	4.53	2.7	5.68	2.7
	in practice	4.50	2.5	5.76	2.8
	post practice	4.56	2.4	4.43	2.7
	pre competition	4.46	3.1	6.40	2.6
	in competition	4.06	2.8	5.70	2.7
	post competition	3.93	2.8	4.8	3.1
	outside the practice and competition environment	4.90	3.04	5.63	2.4

4. Discussion and Conclusion

The results showed that the highest self-talk application is for pre-competition. About 52.6% of the participants believe that the self-talk application does not change during the year. The most self-talk application is related to early in the competition and during the skill performance. Most of the content of athletes' self-talk is positive and covert self-talk with complete sentences. The results show that strengthening the mood, relaxation, and maintaining motivation are the main reasons for self-talk application in practice, relaxation and coping with difficult situations and controlling the effort is the main reason for Self-talk application in competition. The results also showed that the highest mean is when self-talk is used alone to learn or refine a skill. The mean pre-planned self-talk is more than the similarity of self-talk statements in practice and competition. Females more likely use self-talk early in the season and during skill performance than male athletes, and males more likely use neutral self-talk than females. Females, compared to males, use self-talk to increase self-confidence and psychological preparation, maintain or increase motivation, remember goals, and cope with difficult situations. Research generally examines the beneficial effects of self-talk on learning and motor performance in a variety of contexts; For example, athletes in Perkos et al. (2002); Skills in Landin and Herbert (1999); Skills Learned Harvey et al. (2000); And new skills in Hatzigeorgiadis et al. (2004) (12, 16-18). Also, research, SpeedRunners in Mallett and Hanrahan

(1997) (19); Skiing in Rushall et al. (1988) (20); Tennis in Landin and Herbert (1999) (17); And basketball passes, shots and dribbles in Perkos, & Chroni (2002) (16), and Theodorakis et al. (2001) (21); Dart in Van Raalte (1995) (22) and power task in Theodorakis (2000) (23) showed that self-talk leads to improved performance. Hardy et al. (2018) (8) considered self-talk as a psychological skill that facilitates performance and coping with negative psychological pressures. He highlighted self-talk as a potential source for achieving peak performance (14).

Research has shown that athletes use self-talk strategies to generate and increase motivation and cues for physical exercise (4). In addition, Zinsser, Bunker, and Williams (2006) stated that self-talk improves performance through better skill acquisition, increased self-confidence, self-efficacy, adjustment of ineffective habits, and effort control (5). Weinberg and Gould (2003) also suggested that athletes use self-talk strategies in various ways, such as gaining skills and learning a new skill, eliminating a bad habit, gaining motivation, controlling attention, changing moods, and enhancing self-confidence (6). Thus, self-talk can be used in a variety of contexts and for a variety of purposes. Findings are in line with the fact that athletes use self-talk extensively and for various reasons.

The findings based on gender showed that in many cases there were no significant differences in the studied variables between male and female athletes, including: the self-talk application by male

and female athletes pre-practice, in practice, post-practice, pre-competition, in competition and post-competition and outside the practice and competition environment, opinions about the change in self-talk throughout the year, self-talk application holiday season, late-season and before skill performance, positive, negative, overt, covert, one-word, short and complete sentences, learned skills refinement, strategy / game / plan refinement, To strengthen the spirit, relaxation, Anger management, To Maintain or regain focus, To increase the self confidence, To Help psychological preparation, To Cope with difficult situations, To Maintain or increase motivation, To Control the effort and goal Reminder, the self-talk application combined with imagery, combined with physical exercise, and alone to learn or refine a skill and pre-planned self-talk and the similarity of self-talk statements in practice and competition and belief in the self-talk effectiveness on sports performance.

Female athletes more likely use self-talk early in the season and during skill performance than males. In these two periods of time, early in the competition season and during the skills performance, female athletes increase self-confidence and psychological preparation through self-talk because these periods are stressful. Our findings also show that female athletes use more self-talk to increase self-confidence, help psychological preparation, maintain motivation, remind goals than males, which is in line with our findings.

Male athletes more likely use neutral self-talk than females. The seems to be their lower ability to focus on the main goals when performing or competing, and females show more ability to pay attention and focus.

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