

## Role Awareness Training in Student Athletes : Does Awareness of Roles Improve Self Regulation?

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### ABSTRACT

Self-regulation can help student-athletes in achieving goals related to their role as athletes or students. Previous research has shown that role awareness training can improve psychological well-being, but the effect of this intervention on self-regulation has yet to be discovered. This research aims to determine the effect of role awareness training on student-athletes in the SLOMPN Unesa dormitory. The method used is quantitative experimental with a pretest-posttest control group design. The experiment lasted in 4 meetings and was conducted on 12 student-athletes aged 13-16 who were obtained through saturated sampling. Data was obtained through the pretest and posttest of the self-regulation instrument, which was then calculated using the independent t-test method. The results of this study indicate that role awareness training influences student athletes' self-regulation, with a t value of 2,493 and  $p < 0,05$ . Student-athletes in this study also had equally high autonomous and controlled regulation tendencies.

**Keywords : role awareness training; self regulation**

### ABSTRAK

Regulasi diri dapat membantu atlet pelajar dalam mencapai tujuan terkait peran mereka sebagai atlet ataupun pelajar. Penelitian sebelumnya telah menunjukkan bahwa *role awareness training* mampu meningkatkan *psychological well being*, tetapi belum diketahui pengaruh intervensi tersebut terhadap regulasi diri. Penelitian ini bertujuan untuk mengetahui pengaruh *role awareness training* terhadap atlet pelajar di asrama SLOMPN Unesa. Metode yang digunakan adalah eksperimental kuantitatif dengan *pretest-posttest control group design*. Eksperimen yang berlangsung selama 4 pertemuan ini dilakukan pada 12 atlet pelajar yang berada pada usia 13-16 tahun yang diperoleh melalui *sampling* jenuh. Data diperoleh melalui *pretest* dan *posttest* instrumen regulasi diri yang kemudian dihitung menggunakan metode uji t independen. Hasil penelitian ini menunjukkan bahwa *role awareness training* memiliki pengaruh pada regulasi diri atlet pelajar dengan nilai  $t=2,493$  dan  $p < 0,05$ . Atlet pelajar dalam penelitian ini juga ditemukan memiliki tendensi terhadap *autonomous* dan *controlled regulation* yang sama-sama tinggi.

**Kata kunci : pelatihan kesadaran peran; regulasi diri**

### INTRODUCTION

Student-athletes have different challenges and demands from ordinary athletes as they have additional demands to balance their academic learning with sports activities (Gomez et al., 2018). Student-athletes are individuals with the status of students and athletes that require them to participate in teaching and

learning activities and sports competitions (Wisudawati et al., 2018). These challenges and demands often result in poor well-being and nonoptimal development in academics or sports for student-athletes. Some of the challenges of student-athletes include completing academic demands with minimal time, carrying out tasks that drain energy and

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emotions, dealing with coaches and teammates, dealing with injuries, competing in stressful situations (Proctor & Boan-Lenzo, 2010), maintaining stable academic and athletic performance, et cetera.

Student-athletes may implement self-regulation to enhance their sports and academic performance. Self-regulation is individuals' control over their cognition, behavior, emotions and motivation by using personal strategies to achieve predetermined goals (Panadero & Alonso-tapia, 2014). Self-regulation is essential for success and effectively improves athletes' sports performance (Cleary & Zimmerman, 200). Student athletes' self-regulation ability may help them initiate and direct their efforts toward achieving goals (Zimmerman, 1989). Student-athletes are sometimes not given many opportunities to participate in classroom learning, so it is not uncommon for them to lag in their studies compared to their other friends. It can be assumed that good self-regulation can help student-athletes achieve their goals related to their role as athletes and students.

Psychological skills training (PST) can be an opportunity to foster the self-development of young athletes in competitive sports and facilitate their development in other areas of life by generalizing the use of mental skills (Tremayne & Tremayne, 2004). Psychological skills training is systematic and consistent mental or psychological training to improve performance, enjoyment, or self-satisfaction with sports and physical activities (Weinberg & Gould, 2007). Two decades ago, the global awareness phenomenon of the benefits of mental skills training for

young people only started. Tremayne & Tremayne (2004) have successfully applied goal setting, imagery, relaxation, and stress management methods to increase physical fitness, self-confidence, and self-esteem.

Verhaeghen and Mirabito (2021) stated that self-awareness is related to self-regulation. Ross et al., (2011) also showed that self-awareness can influence self-regulation. Based on this research, it can be assumed that good self-awareness can encourage one's self-regulation abilities. Self-regulation is related to self-awareness in how individuals control their emotions, behavior, and knowledge about themselves. Therefore, PST in this study used role awareness training, which combines the concepts of self-awareness and role awareness. Role awareness training in this research is defined as intervention or training on an individual's ability to understand and be aware of their internal state (emotions, cognition, and physiological responses) as well as their values and goals or motivation and the ability to be aware of their role or expected behaviors, from the position they held.

There is a lot of awareness training that has been carried out in previous studies, including situation awareness (Graafland et al., 2015), self-awareness (Hatami et al., 2016), and mental health awareness training (Dimoff et al., 2016). Several studies have conducted awareness training on athletes, but only a few researchers have conducted awareness training linked to roles. Research on role awareness training that has been conducted has been found to have a positive influence on psychological well-being and emotional regulation (Jannah et al., 2024; Oktafiani

& Jannah, 2023). We assume that role awareness can help athletes become more aware of and understand their responsibilities. Furthermore, awareness of the responsibilities of their roles is expected to encourage student-athletes to improve their self-regulation and manage their time, priorities, and resources. This research aims to determine the effect of role awareness training on self-regulation in student-athletes. We proposed that role awareness training influences student-athletes' self-regulation.

## **RESEARCH METHOD**

### **Study participants**

The subjects in this research were 12 Unesa National Potential Young Athletes Training Center (SLOMPN) student-athletes, with 7 male subjects and 5 female subjects. The twelve student-athletes were aged 13-16 years, which means the subjects were still in middle and high school. The student-athletes who are the subjects of this research have different sports backgrounds, namely swimming, archery, and taekwondo. The subjects also had provincial, national, or international sporting achievements. The sampling technique used was saturated sampling. The subjects were then divided into two groups, namely the experimental group and the control group, each comprising 6 subjects.

### **Study organization**

The experimental design in this research is the pretest-posttest control group design. This experimental design

only treats the experimental group, while the control group is left untreated. Before the procedure began, the control and experimental groups were instructed to complete the pretest. The role awareness training procedure for this research was carried out in four meetings (Parahita & Jannah, 2023), wherein, in each meeting, there would be a repetition of material in varied forms. Each meeting of role awareness training consists of three sessions: Hi It is Me, My Role, and I Hope. Variations in delivering this material are through goal-setting and traditional training methods, such as lectures, behavior modeling, audiovisual techniques, roleplay, and reflection. After all role awareness training procedures have been completed, the final stage is collecting posttest data from the experimental and control groups.

The instrument used in this research is the self-regulation scale, which was created based on four self-regulation aspects from the self-determination theory perspective: intrinsic motivation, external motivation, introjected motivation, and identified motivation. This scale consists of 14 items with five alternative answers with a score of 1–5. Thus, the lowest and highest scores of subjects obtained were 14 and 70, respectively. In addition, the lowest and highest scores obtained for each aspect of self-regulation were 5 and 25 for external motivation; 4 and 20 for introjected and identified motivation; and 1 and 5 for intrinsic motivation.

**Table 1**  
**Score Category of Self Regulation Scale**

Category	Score
Very low	14-25,2
Low	25,21-36,4
Medium	36,41-47,6
High	47,61-58,8
Very high	58,81-70

**Table 2**  
**Score Category of Self Regulation's Aspects**

Category	External motivation score	Injected & identified motivation scores	Internal motivation score
Low	5-11,6	4-9,3	1-2,3
Medium	11,7-18,3	9,35-14,65	2,35-3,65
High	18,4-25	14,7-20	3,7-5

**Statistical analysis**

The independent t-test was used to analyze the differences between the experimental and control groups. The difference in the population averages of the experimental and control groups was obtained by testing the gain score of each group. Data calculations were carried out using JASP version 0.18.3.0.

**RESULTS AND DISCUSSION**

Based on Table 1, each experimental and control group had 3 people with high scores and 3 with very high scores on the pretest results. Subjects are said to have a high score if they are in the value range of 47,61-58,8, while subjects are said to have a very high score if they are in the value range of 58,81-70. The posttest results showed that the control group had stable scores, with several subjects experiencing a slight decrease or increase

in scores. It can be inferred from Table 1 that control group’s subjects remained in the same score category as they obtained during the pretest. This result differs from the experimental group subjects, who experienced an increase. We found that 3 subjects of experimental group increased from high to very high scores, and 3 others remained stable at very high scores but also experienced an increase.

Table 4 and 6 show that, in general, the pretest results of the experimental and control groups on three aspects of extrinsic motivation (i.e., external motivation, introjection motivation, and identified motivation) are in the high and medium categories. Around 83,3-100 % of the experimental group got high scores, and 0-16,7% got medium scores. Meanwhile, the control group had 66,7-100% of subjects with high scores and 0-16,7% of subjects with medium scores.

However, the experimental and control groups had subjects in the low category for aspects of intrinsic motivation. Based on the pretest results, 16,7% of the experimental group got low scores on intrinsic motivation, while the number for the control group was 66,7%.

The experimental group's posttest results showed that 100% of subjects obtained high scores for the four aspects

of self-regulation (see Table 5). Meanwhile, 100% of control group subjects got high scores on two aspects of self-regulation: external motivation and intrinsic motivation. However, 16,7% of subjects got medium scores, and 83,3% got high scores on the identified motivation. 50% of subjects got low and high scores on intrinsic motivation (see Table 7).

**Table 3**  
**Experimental and Control Group's Data Description**

No.	Experimental Group				Control Group			
	S	Pre test	Post test	Gains Score	S	Pre test	Post test	Gains Score
1	KZ	66	70	4	C.E	68	69	1
2	AAG	62	70	8	US	64	69	5
3	PP	60	69	9	IN	62	66	4
4	ZR	56	59	3	E.B	54	55	1
5	NS	54	59	5	ZA	51	53	2
6	A-Z	52	68	16	NA	52	53	1
<b>Average</b>		58,3	65,8	7,5	<b>Average</b>	58,5	60,8	2,3

**Table 4**  
**Mapping of Experimental Group's Pretest Result in Each Aspect of Self Regulation**

Aspect	Category	f	%
External motivation	Low	0	0%
	Medium	0	0%
	High	6	100%
Introjected motivation	Low	0	0%
	Medium	1	16,7%
	High	5	83,3%
Identified motivation	Low	0	0%
	Medium	0	0%
	High	6	100%
Intrinsically motivated	Low	1	16,7%
	Medium	0	0%
	High	5	83,3%

**Table 5**  
**Mapping of Experimental Group's Posttest Result in Each Aspect of Self Regulation**

<b>Aspect</b>	<b>Category</b>	<b>f</b>	<b>%</b>
External motivation	Low	0	0%
	Medium	0	0%
	High	6	100%
Introjected motivation	Low	0	0%
	Medium	0	0%
	High	6	100%
Identified motivation	Low	0	0%
	Medium	0	0%
	High	6	100%
Intrinsically motivated	Low	0	0%
	Medium	0	0%
	High	6	100%

**Table 6**  
**Mapping of Control Group's Pretest Result in Each Aspect of Self Regulation**

<b>Aspect</b>	<b>Category</b>	<b>f</b>	<b>%</b>
External motivation	Low	0	0%
	Medium	2	33,3%
	High	4	66,7%
Introjected motivation	Low	0	0%
	Medium	0	0%
	High	6	100%
Identified motivation	Low	0	0%
	Medium	0	0%
	High	6	100%
Intrinsically motivated	Low	4	66,7%
	Medium	0	0%
	High	2	33,3%

**Table 7**  
**Mapping of Control Group's Posttest Result in Each Aspect of Self Regulation**

<b>Aspect</b>	<b>Category</b>	<b>f</b>	<b>%</b>
External motivation	Low	0	0%
	Medium	0	0%
	High	6	100%
Introjected motivation	Low	0	0%

	Medium	0	0%
	High	6	100%
Identified motivation	Low	0	0%
	Medium	1	16,7%
	High	5	83,3%
Intrinsically motivated	Low	3	50%
	Medium	0	0%
	High	3	50%

**Table 8**  
**Result of Independent Samples T-Test**

Variable	t	df	p
Self Regulation	2,493	10	0,032

*Note.* Student's t-test.

Table 8 shows that the significance value obtained from the independent t-test is 0,03. This result means that there are differences in self-regulation between the control and experimental groups and that role awareness training significantly affected the subjects' self-regulation.

This research found that role awareness training significantly affects student athletes' self-regulation. After the experimental group received treatment, their individual and average scores improved significantly compared to the control group, which did not receive treatment (see Table 3). Our research encourages student-athletes to understand the nature and duties of their roles as athletes and students and their strengths, weaknesses, and goals. Self-awareness can encourage individuals' self-regulation. Self-regulation includes a self-evaluation process that depends on aspects of individual self-awareness (Morin, 2011). The role of self-awareness in self-regulation is that individuals need to be aware of aspects within themselves that need to be changed in order to be able to control their cognition and behavior

(Mikulas, 1986). Role awareness training in this research tried to increase student athletes' role awareness and self-awareness so that they are expected to voluntarily and consistently use self-regulation, which can positively influence their performance as athletes and students.

Psychological skills training (PST) integrates one or more cognitive and behavioral strategies to assist psychological functions in performance and learning (Patrick & Hrycaiko, 1998; Shambrook & Bull, 1996). PST or cognitive training strategies given to soccer athletes are found to positively affect the development of their motor and psychological skills. The PST used in this research is role awareness training, which consists of goal-setting and other traditional training methods, such as lectures, behavior modeling, audiovisual techniques, role play, and reflection. One of the PST methods, goal setting, is stated to increase motivation, attention, self-confidence, and focus on the championship (Slimani et al., 2016). Orange (1999) stated that modeling can

be an effective method for teaching individuals to self-regulate. Previous PST research has used self-compassion intervention to improve self-regulation (Dundas et al., 2017). The results of this research show that self-compassion intervention can increase healthy self-regulation and reduce the levels of unhealthy self-regulation. That study implies that PST can be an effective intervention to improve self-regulation.

One of the few factors that can influence self-regulation, according to SDT, is autonomy. SDT views autonomy as key to understanding the quality of one's behavioral regulation (Ryan & Deci, 2006). Autonomy will be deterred when individuals feel controlled, pressured, or forced to do something (Rigby, 2014). Autonomy is not strictly self-initiative; it also includes behavior encouraged by external demands that the individual fully approves and supports (Ryan & Deci, 2006). Satisfaction with autonomy is influenced by factors such as how requests, goals, or rules are conveyed, how a message is designed and can act as a stimulus or encouragement, and how meaningful the options and opportunities to choose are provided. Messages that are demanding, monitoring or evaluation that are too obvious, and uncertain sanctions and rewards can lead to decreased autonomy and motivation (Rigby, 2014).

Self-regulation has four aspects: external motivation, introjected motivation, identified motivation, and intrinsic motivation. Aspects of extrinsic motivation include external motivation, introjected motivation, and identified motivation, and each has a different degree of autonomy (self-determined). Sequentially, the motivation with the

highest degree of autonomy is intrinsic, identified, introjected, and external (Brown & Ryan, 2015). The pretest results of the experimental and control groups showed that subjects generally had a higher percentage level of extrinsic motivation than intrinsic motivation. The control group's posttest results experienced an increase in intrinsic and all extrinsic motivation except identified motivation.

Maturation in the control group may occur due to natural changes (Jannah, 2016). It is assumed that external factors have influenced the control group in aspects of competence, autonomy, and relatedness, which led to a slight increase in self-regulation. A study showed that athletes gained a sense of autonomy due to high commitment to their team members and coaches and that relatedness is a strong predictor of intrinsic motivation (Kimball, 2007). Agendas, such as upcoming practices and competitions, may also encourage student-athletes to apply self-regulation to control desired outcomes or achieve goals.

The posttest results of the experimental group showed an increase in the four aspects of self-regulation, especially in introjected and intrinsic motivation. High intrinsic motivation indicates that the student-athletes in this study received pleasure or satisfaction from carrying out self-regulation (Ryan & Deci, 2000). High introjected motivation means the subjects self-regulate because of internal pressure, such as obligation and guilt (Guay, 2021). High identified motivation means the subjects self-regulate because they consider the behavior essential or valuable (Legault et al., 2007). High



external motivation means that the subjects carried out self-regulation to get rewards or avoid punishment (Guay, 2021).

In general, student-athletes in this study had high intrinsic and extrinsic motivation. The high level of extrinsic motivation of student-athletes in this study may be related to their role. As athletes, subjects gain benefits that students do not usually get (i.e., financial independence at a young age). Another possibility is that subjects are not yet fully aware of their personal goals and preferences, so their behavior tends to be motivated by external stimuli (Rigby et al., 2014). Using rewards to control individual behavior can cause the individual to be vulnerable to losing intrinsic motivation (Ryan & Deci, 2006). However, it differs from the subjects in this study, who still had high intrinsic motivation and a high degree of autonomy. This result means that subjects also self-regulate because of their desires.

External and introjected motivations indicate an individual's tendency to implement controlled self-regulation. Self-regulation driven by these two motivations tends to be inconsistent and of low quality because internalization only partially occurs and is carried out perfunctorily (Ryan & Deci, 2006). On the other hand, intrinsic and identified motivation can encourage individuals to behave consistently and with good quality because it is done at their own will (autonomous). SDT views autonomous self-regulation as a predictor of good quality and consistent behavior (Brown & Ryan, 2015; Guay, 2022) or performance. Meanwhile, controlled self-regulation is less recommended because it is associated with poor performance quality

and well-being (Ryan & Deci, 2006). The application of controlled self-regulation by individuals may be caused by a lack of self-awareness or understanding of oneself and a lack of support to become autonomous (Rigby et al., 2014). Subjects in this study may alternate between controlled and autonomous self-regulation depending on their situation.

The limitation of this research is that it has a small number of subjects, so future research may be able to use a larger number of subjects. Future research may also use subjects with different characteristics from this study, which used student-athletes aged 13–16 years.

## CONCLUSION AND SUGGESTIONS

This research proposes that role awareness training influences student athletes' self-regulation. The student's test results were 2,493, and the significance was less than 0,05. This research found that all research subjects had an equally high tendency to use controlled and autonomous regulation. It can be seen from the four aspects of the subject's self-regulation, which are equally high. This finding can be a consideration for future researchers to examine the factors behind this phenomenon and how they influence one's self-regulation.

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