

# **EFFECTS OF RELAXATION TECHNIQUE ON THE EMOTIONAL DYSREGULATION OF AMATEUR BASKETBALLERS IN LAGOS STATE**

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## **Abstract**

This study examined the effects of relaxation techniques on the emotional dysregulation of amateur basketballers in Lagos State. Pre-test-post-test quasi-experimental control group research design was used for the study. Purposive and simple random techniques were used to select participants from registered academies. The instruments used to obtain relevant data for the study were Emotional Style Questionnaire (ESQ) and Educational training manual on the study's intervention area. The data collected were analysed using Analysis of Covariance (ANCOVA). The formulated hypothesis was tested at 0.05 level of significance. The study revealed that relaxation technique had a significant positive effect on the emotional dysregulation of amateur basketballers in Lagos State. It was concluded that incorporating relaxation techniques into regular basketball training programmes will improve athletes' ability to cope with competitive pressure, regulate emotional responses, and maintain optimal performance. The study recommended that coaches should routinely assess the emotional well-being of players and provide appropriate psychological interventions to athletes who exhibit signs of emotional dysregulation during training and competition.

## **Introduction**

Emotion is an important component of total human functioning and critically important for understanding main core phenomena in sports. Emotions are most often conceptualized as a set of experiential, physiological and behavioural response tendencies that unfold over time (Mauss, Levenson, McCarter, Wilhelm, & Gross, 2005). This occur when an individual evaluates a situation as relevant to their goals (Mauss, Bunge, & Gross, 2007). Emotional arousal and expression are not always helpful or appropriate and the capacity to contain potentially overwhelming emotional experiences is an important psychological skill (Greenberg, Elliott & Pos, 2007). Emotion that is under-regulated often impedes goal achievement, such as when failure to regulate anger leads to the breakdown of a relationship, or failure to regulate anxiety leads to poor performance in a job interview.

Emotional dysregulation refers to persistent difficulties in monitoring, evaluating, and modifying emotional responses in ways that are appropriate to situational demands and personal goals (Gross, 2015). Athletes with poor emotional regulation may exhibit excessive anxiety, anger, frustration, aggression, impulsive behaviour, or emotional withdrawal during sporting activities. Such emotional disturbances can impair concentration, reduce confidence, increase the likelihood of technical errors, and negatively influence team cohesion and competitive outcomes (Jones, 2017). In team sports, where rapid decision-making and emotional control are essential for successful execution of skills, emotional dysregulation can significantly diminish athletic performance.

The growing recognition of psychological factors in sports performance has shifted attention beyond physical conditioning to include mental skills training. Sports psychologists have consistently emphasized that athletes who possess effective emotional regulation strategies are better equipped to cope with competitive stress, recover from setbacks, and sustain optimal performance under pressure (Birrer & Morgan, 2010). Mental preparation techniques such as goal setting, imagery, self-talk, mindfulness, breathing exercises, meditation, and progressive muscle relaxation have therefore become integral components of athlete development programmes across different sporting disciplines.

Among these psychological interventions, relaxation techniques have emerged as one of the most effective methods for managing stress and regulating emotions. Relaxation techniques are systematic psychological and physiological strategies designed to reduce muscular tension, decrease physiological arousal, and promote psychological calmness (Davis, Eshelman & McKay, 2008). These techniques include progressive muscle relaxation, diaphragmatic breathing, meditation, guided imagery, autogenic training, yoga, and mindfulness-based relaxation practices. They function by activating the parasympathetic nervous system, thereby reducing heart rate, muscle tension, cortisol secretion, and anxiety levels while enhancing emotional stability and cognitive functioning (Jerath et al., 2015).

Research (Pelka et al., 2016) has demonstrated that relaxation techniques contribute significantly to improved emotional regulation among athletes. Regular practice of controlled breathing and progressive muscle relaxation has been associated with reductions in competitive anxiety,

emotional tension, and performance-related stress while improving confidence, concentration, and self-control. Similarly, mindfulness-based interventions have been shown to enhance athletes' awareness of emotional experiences without becoming overwhelmed by them, thereby promoting adaptive emotional responses during competition (Gardner & Moore, 2017). These findings suggest that relaxation techniques may provide valuable coping mechanisms for amateur athletes who often lack formal psychological support.

Basketball is a highly competitive sport that requires athletes to maintain not only physical fitness and technical proficiency but also psychological stability. The fast-paced nature of the game, coupled with intense competition, officiating decisions, audience expectations, and pressure to perform, often exposes players to a wide range of emotional experiences. For amateur basketball players, these pressures may be particularly challenging due to limited psychological preparation, inadequate access to sports psychology services, and competing academic, occupational, or personal responsibilities. Consequently, many amateur basketballers experience difficulties in regulating their emotions during training and competition, which may adversely affect their performance, decision-making, interpersonal relationships, and overall well-being (Weinberg & Gould, 2019).

Emotional dysregulation among amateur basketballers may manifest through aggressive reactions toward opponents or officials, loss of concentration after mistakes, excessive nervousness before games, poor communication with teammates, emotional exhaustion, and inconsistent performance. These behavioural and emotional responses not only hinder individual development but may also affect team dynamics, sportsmanship, and athlete retention. The increasing awareness of mental health challenges among athletes further underscores the need for evidence-based psychological interventions that enhance emotional resilience and promote healthy coping strategies (Rice et al., 2016).

Relaxation techniques offer practical, cost-effective, and non-pharmacological interventions that can easily be integrated into routine sports training. Coaches can incorporate breathing exercises before competitions, progressive muscle relaxation after training sessions, and guided imagery during pre-performance routines without requiring sophisticated equipment or extensive financial resources. Such interventions may improve athletes' emotional regulation, reduce

competitive anxiety, enhance confidence, and facilitate optimal performance under stressful conditions (Weinberg & Gould, 2019).

The study is designed to investigate the effects of relaxation techniques on the emotional dysregulation of amateur basketballers in Lagos State. The findings are expected to contribute to the growing body of literature in sports psychology, provide empirical evidence for coaches and sports administrators, and promote the integration of psychological skills training into amateur basketball programmes. Ultimately, improving athletes' emotional regulation through structured relaxation techniques may enhance both sporting performance and psychological well-being while fostering sustainable athlete development within Lagos State and Nigeria at large.

### **Methodology**

The research design for this study was quasi-experimental, pre- test, post- test control group design. Two sampling techniques were used to select twenty-three participants for the study. Purposive technique was used to select two registered academies with Lagos State Basketball Association. Sampling technique was deployed to select participants in experimental and control groups. Emotional Style Questionnaire (ESQ) by Kesebir et al. (2019) was the main instrument used for the study. A pilot study using test-retest method was used to determine the local reliability of the instrument at coefficient value of 0.79.

### **Administration of Research Instruments**

The administrations of the research instruments were in three phases, and they were administered to the participants by the researchers. The phases are as follows:

Phase 1: Pre-Treatment Session

Phase 2: Treatment Session

Phase 3: Post-Treatment Session

### **Phase 1: Pre-treatment Assessment**

The researchers administered the Emotional Style Questionnaire (ESQ) to the participants as pre-test two weeks before the treatment session.

### **Phase 2: Treatment Phase**

There were two groups (treatment and control groups. The selected academies were randomly assigned to the treatment and control groups. Group one was exposed to Relaxation Training, while Group two, the control group, did not receive any intervention. The treatment groups met twice a week for eight weeks.

### Phase 3: Post–Test Assessment

At the end of the treatment, which lasted eight weeks, the Emotional Style Questionnaire (ESQ) was re-administered to the same treatment and control groups.

## Results

**Test of Hypothesis:** The hypothesis states that relaxation technique will have no significant effect on emotional dysregulation of amateur Basketballers in Lagos state. This hypothesis was tested using Analysis of Covariance (Ancova) and the result is presented in Table 1;

**Table 1: Ancova showing effect of relaxation technique on emotional dysregulation of amateur basketballers**

| Source              | Sum of Squares        | df | Mean Square | F      | Sig. | Partial Eta Squared( $\eta^2$ ) |
|---------------------|-----------------------|----|-------------|--------|------|---------------------------------|
| Corrected Model     | 5024.304 <sup>a</sup> | 2  | 2512.152    | 42.521 | .000 | .810                            |
| Intercept           | 813.636               | 1  | 813.636     | 13.772 | .001 | .408                            |
| Group               | 3920.823              | 1  | 3920.823    | 66.364 | .000 | .768                            |
| (Relaxation)Pretest | 473.550               | 1  | 473.550     | 8.015  | .010 | .286                            |
| Error               | 1181.609              | 20 | 59.080      |        |      |                                 |
| Total               | 6205.913              | 22 |             |        |      |                                 |

**P < 0.05; F (1, 20) = 4.35; Key:  $\eta^2 = 0.01$  (small effect);  $\eta^2 = 0.06$  (medium effect);  $\eta^2 = 0.14$  (large effect)**

Data in Table 1 are showing effect of relaxation technique on emotional dysregulation of amateur basketballers in Lagos state. From the results, there was a significant effect of relaxation technique on emotional dysregulation of amateur basketballers, because the calculated F-value of 66.364 was greater than the critical value  $F(1, 20) = 4.35$  at 0.05 level of significance. Similarly, the effect size ( $\eta^2$ ) = 0.768 showed a large effect of relaxation technique on emotional dysregulation of amateur basketballers in Lagos state. Therefore, the researcher concluded that relaxation technique had a significant effect on emotional dysregulation of amateur basketballers in Lagos state, because null hypothesis was rejected.

Based on the significant F-value obtained, a Post-Hoc analysis was done using Bonferroni method to determine which of the groups differs from the other in emotional stability, and the trend of the difference

**Table 2: Post-Hoc analysis showing pair-wise comparison between the groups in emotional regulation**

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| (I) Group           | (J) Group           | Mean Difference (I-J) | Sig. <sup>b</sup> |
|---------------------|---------------------|-----------------------|-------------------|
| Relaxation training | Control group       | 26.546*               | .000              |
| Control group       | Relaxation training | -26.546*              | .000              |

From Table 2, the pair-wise comparison of the group showed that the relaxation training group differed from the control group in emotional stability ( $P = 0.000 < 0.05$ ).

## Discussion

The findings of this study demonstrated that relaxation technique had a significant positive effect on the emotional dysregulation of amateur basketballers in Lagos State. Participants who engaged in structured relaxation interventions exhibited improved emotional control, reduced levels of anxiety, anger, frustration, and emotional instability, as well as enhanced concentration during training and competition. These findings suggest that relaxation techniques constitute an effective psychological strategy for improving emotional regulation among amateur athletes. The positive outcome of this study supports the theoretical proposition of Gross's (2015) Emotion Regulation Theory, which emphasizes that individuals can learn adaptive strategies to monitor, modify, and regulate their emotional responses to stressful situations. Basketball is characterized by frequent emotionally demanding situations such as competitive pressure, officiating decisions, physical contact, missed scoring opportunities, and game uncertainties. The findings indicate that relaxation techniques equip athletes with the psychological resources required to regulate these emotional responses effectively, thereby improving behavioural control and overall sporting performance.

The results are further supported by Pelka et al. (2016), whose meta-analysis found that psychological relaxation interventions significantly improve athletes' recovery from physical and psychological stress while enhancing emotional well-being and readiness for subsequent performance. Their findings indicate that relaxation strategies positively influence both physiological and psychological recovery processes, thereby improving emotional regulation. The consistency between their findings and those of the present study reinforces the effectiveness of relaxation techniques as an evidence-based intervention for athletes. The findings also align with Gardner and Moore's (2017) Mindfulness-Acceptance-Commitment (MAC) approach, which suggests that mindfulness and acceptance-based relaxation strategies

enable athletes to acknowledge emotional experiences without becoming overwhelmed by them. Athletes who practice mindfulness develop greater emotional awareness, attentional control, and psychological flexibility, thereby reducing maladaptive emotional reactions during competition. The improved emotional regulation observed among amateur basketballers in this study may therefore be attributed to similar psychological mechanisms.

## **Conclusion**

This study investigated the effects of relaxation techniques on the emotional dysregulation of amateur basketballers in Lagos State. Based on the findings, it was concluded that relaxation techniques are effective in reducing emotional dysregulation among amateur basketball players. The study revealed that athletes who participated in structured relaxation exercises demonstrated improved emotional control, reduced anxiety and frustration, enhanced concentration, and greater psychological stability during training and competitive situations.

The findings suggest that incorporating relaxation techniques into regular basketball training programmes will improve athletes' ability to cope with competitive pressure, regulate emotional responses, and maintain optimal performance. Effective emotional regulation not only contributes to better individual performance but also promotes teamwork, sportsmanship, resilience, and overall psychological well-being. Consequently, relaxation techniques should be regarded as an essential component of athlete development alongside physical, technical, and tactical training.

## **Recommendations**

Based on the findings of this study, the following recommendations were proposed.

1. Basketball coaches should incorporate structured relaxation techniques, such as deep breathing exercises, progressive muscle relaxation, guided imagery, and mindfulness practices, into regular training sessions to improve athletes' emotional regulation.
2. Sports psychologists should be engaged by basketball clubs, educational institutions, and sports associations to provide psychological skills training and emotional support for amateur basketballers.

3. The Lagos State Basketball Association and other relevant sports governing bodies should organize periodic workshops, seminars, and training programmes on stress management, emotional regulation, and relaxation techniques for athletes and coaches.
4. Physical education and sports science departments in tertiary institutions should integrate mental skills training, including relaxation techniques, into their coaching and athlete development curricula.
5. Coaches should routinely assess the emotional well-being of players and provide appropriate psychological interventions to athletes who exhibit signs of emotional dysregulation during training and competition.

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