# Research on Physical and Psychological Activities of Sports Players in Association with Primary Angle Glaucoma

**Ayhan ÖNAL**[1*]

**Abstract**

People with primary angle glaucoma should be cautious about the physical activities they engage in, as these activities might lead to a rise in intraocular pressure. Hence, improvements in healthcare sectors have assisted in dispelling these myths. Yet, due to increased competition, those with primary angle glaucoma are more prone to experience psychological anguish. This research aims to investigate the effect of mental and physical activities on the psychological stress of athletes with primary angle glaucoma. For this reason, an experimental study was done, and around 115 athletes from diverse Iraqi public high schools were chosen. They were divided into four groups: control, physical, psychological, and combined activities. This study was done over 12 weeks, and the "Psychological Stress Scale" was utilized to measure psychological stress for all groups. The statistical analysis was conducted using SPSS. After 12 weeks of experimental treatment, both psychological and physical groups had a significant impact on various dimensions of psychological stress, including development (p= 0.012), social contact (p= 0.015), and life (p= 0.031) (p <0.05), total scores (p= 0.001), life events (p= 0.002), and family (p= 0.0001) (p <0.01). The physical exercises were kept at a moderate to low intensity to prevent exertion on the volunteers. This study concludes that combining physical and psychological activities is essential for lowering psychological stress in players with primary angle glaucoma.

**Keywords:** Physical Activities; Psychological Activities; Sports Players; Primary Angle Glaucoma; Experimental Group; Control Group

## 1. Introduction

Psychological pressure is a physical and mental strain brought on by exposure to external stimuli. With minimal stress, people's progress can be slowed. Too much or too little psychological pressure will affect the individual or the environment. In their professional and personal lives, people can be inspired by the appropriate pressure. A person's schoolwork, career, and personal life might be ruined if they are subjected to too much or too little pressure (Dusenberry & Robinson, 2020). Encourage humanistic care and psychological therapy for adolescents to be self-confident, rational, calm, and optimistic and to nurture healthy psychological and will attributes. Increase youth mental health education and services (Yu, 2021). With the aid of physical activity and psychological training, college students may participate in activities more actively while simultaneously enhancing their social skills, attitude, and worldview. The psychological strain of the development dimension can be greatly alleviated through psychological training. Moderate-intensity workouts and psychological training are better for coping with emotional stress than physical exercise or psychological training due to their positive regulatory effects.

Physical activity can be planned and categorized according to its function, or it might occur spontaneously (for recreation, labor, or transportation): Health and physical capability are the primary objectives of physical activity. The primary purpose of physical training is to enhance an individual's ideal bodily capabilities and performance. When an individual's energy consumption is near that of resting, they are considered physically inactive. Individuals who do not engage in the appropriate level of physical exercise are classified as physically inactive and are sometimes referred to as "sedentary." Sports can be classified based on age, gender, desire level, weight, and other factors. In 2018, the Chinese Communist Party's party group in charge of the ministry of education issued guidelines for the mental health education of college students. Its guiding philosophy promotes the holistic development of student's mental health, ideological and moral traits, and scientific and cultural abilities. It aims to raise students' knowledge of mental health concerns and improve their mental health (Ren & Liu, 2021).

Glaucoma is a group of illnesses marked by the characteristic cupping of the optic disc and associated visual field defects due to the loss of retinal ganglion cells. It is the major cause of permanent blindness and a progressive condition worldwide. Primary open-angle

[1*] MD, PhD, Ophthalmologist, Surgeon, Istanbul Yeni Yüzyıl Unıversıty, Istanbul, Turkey. Email: drayhanonal@yahoo.com.tr, ORCID İD: https://orcid.org/0000-0003-3637-0495

glaucoma (POAG) is characterized by an open, seemingly normal anterior chamber angle and increased intraocular pressure (IOP) in the absence of any other illness. Secondary glaucoma is a situation where the cause of the increased IOP is recognized. This condition is referred to as normal tension glaucoma if the intraocular pressure is within normal levels (NTG). Individuals over 40 are more prone to the progressive, chronic illness known as glaucoma (Hecht et al., 2017). After the condition has been detected, the specialist's primary objective is to halt its progression as much as possible. Surgical intervention or continuing medical care is necessary for this. In addition, a patient's lifestyle and hobbies might impact the glaucoma progression.

This study's major objective is to investigate athletes' physical and psychological activities with primary angle glaucoma. The following objectives attain this purpose:

- To determine the impact of physical activities on the psychological stress of sports players with primary angle glaucoma.
- To investigate the influence of psychological activities on the psychological stress of sports players with primary angle glaucoma.
- To explore the joint influence of physical and psychological activities on the psychological stress of sports players with primary angle glaucoma.

## 2. Literature Review

Literature-based study on the psychological stress of employees is extensive (Khliefat et al., 2021). Several studies have identified various characteristics that reduce psychological stress and proposed a method for doing so (Nawab et al., 2018). Similarly, the current study highlighted the relationship between psychological and physical training, essential for encouraging activities that reduce psychological stress in workers. Earlier studies studied the relationship between athletics and psychological training. Thus, this study has theoretical and practical consequences (Dueñas et al., 2020).

### 2.1 Effect of sports on Glaucoma prevalence

Professor Janeczko et al. (2020) state that, in contemporary psychology, stress arises when a person is in a risky position and cannot quickly diminish or remove the threat. These sensations, which typically remain after particular life experiences, will eventually build into daily strain. Several people regularly question the glaucoma expert if specific sports, activities, or pastimes may affect their condition owing to the enhanced quality of life and life expectancy. A research study (Moreno-Montañés et al., 2018) was done to generate patient recommendations based on available scientific information. Some sports and activities may affect the onset or progression of glaucoma. To provide patients with the best advice possible, glaucoma experts must be well-informed on the scientific findings published in journals. Examining activities and behaviors associated with glaucoma in the literature yields inconsistent results due to the lack of study or the minimal quantity of evidence, which consists of either relatively few cases or short-term follow-ups. When patients inquire whether they may engage in specific activities, we must guide them to at least halt the condition's progression. Generally, exercising and improving overall health via sports is a good idea to promote systemic circulation.

### 2.2 Effects of sports training and psychological training

It was investigated (Wu, 2022) how sports and psychological training influenced the psychological stress of Chinese employees. Although no psychological training was offered and the exercise intensity was limited between moderate and low, several measures improved. The psychological strain of the development dimension can be greatly alleviated through psychological training. For coping with psychological strain, the positive regulating effect of moderate-intensity exercise plus psychological training is better than physical exercise or psychological training alone. Hence, it is evident that combining physical exercise with psychological training is advantageous and should be encouraged.

The population-based Beijing Eye Study examined the links between cognitive function and ophthalmological traits by evaluating 3127 individuals physically and ophthalmologically (Jonas et al., 2018). CFS was not significantly associated with age-related macular degeneration, open-angle glaucoma, diabetic retinopathy, cataract, retinal vein occlusions, or pseudo exfoliation prevalence. Although the cause of the association between lower cognitive function and under-corrected visual acuity is unknown, the associations highlight the need for earlier and more routine refraction testing in the elderly to provide them with adequate glasses and prevent vision-related cognitive decline. It is crucial to investigate the connections between leptochoroid, primary angle-closure glaucoma, and cognitive function.

The research examined whether athletes who participate in different types of sports training also exhibit distinct patterns of performance on general cognitive tasks (Chang et al., 2017). Sixty participants underwent a battery of physical and cognitive tests before being divided into three groups: the durability group, the motorically complicated group, and the control group. Athletes in the endurance and motorically complex groups had the greatest cardiovascular and motor fitness levels, respectively. Yet,

there were no differences in cognitive ability across the three groups. These findings showed that measures of general cognition in top athletes are unrelated to sports training that results in high cardiovascular or motor fitness. To optimize the good effects of training on total cognitive function, it was advised that coaches and trainers should encourage athletes to monitor their stress levels throughout the exercise.

## 3. Methodology

### 3.1 Research Approach

For this study, male athletes with primary angle glaucoma (PAG) from different Iraqi public high schools were selected using a suitable sample. To establish the PAG of the participants chosen for effective results, a "visual field examination" was conducted. Throughout this extensive investigation, several participants dropped out. In contrast, the male participants were divided into control and experimental groups. Twenty male athletes with PAG comprised the control group, thirty male athletes with PAG comprised the physical activity group, and twenty-five male athletes with PAG comprised the psychological activity group.

Nonetheless, 40 male athletes with PAG were included in the physical and psychological activity group. Thus, 115 male athletes with PAG participated in this study. The duration of 12 weeks was chosen for this research.

### 3.2 Research Method

#### 3.2.1 Experimental design

For this work, an experimental investigation was undertaken. For this aim, the inter and intra-group pre-post tests were used to compare the experimental and control groups. For the experimental physical activity group, the basketball exercise was incorporated. In contrast, the psychological activity group consisted of psychological training for the selected athletes, but the combination group also called the mixed group, comprised both of these activities. The control group concentrated solely on the physical education curriculum during this procedure. The specified activity (basketball) was performed for forty minutes by both the physical and combined activity groups. Using a "polar heart rate telemeter." the heart rate of four randomly selected individuals from each group was measured every 10 minutes. The regulated heart rate for this purpose varies from 130 to 150 beats per minute. This activity was performed three times each week. However, physical activity was limited to thrice per week for the control and psychological activity groups. Psychological training was conducted once per week for 40 minutes with the psychological and mixed groups but not with the physical exercise and control groups. The primary goals of the psychological activity are to improve the volunteers' communication methods, to assist them in acquiring new attitudes and behaviors, to foster the development of cognitive and teamwork skills among the volunteers, and to emphasize emotional factors alongside physical performance. Moreover, interpersonal skills, self-regulation, and self-awareness training are incorporated into this experimental design. Role-playing, group discussion, experience sharing, and Q&A were also encouraged in class. The teachers provided great guidance.

### 3.3 Measuring Procedure

Using the "Psychological Stress Scale" (PSS), Queirós et al. (2020) measured the psychological stress of chosen male athletes. This measure was further subdivided into social contact, family, life, development, and learning. Each subscale's score was equivalent to its overall item score. The total score for psychological stress was the same as the total score. This study's evaluation consists of criterion validity, internal consistency, test-retest reliability, and content validity. In this study, group psychological measuring was utilized. Before and after the experiment, the selected participants completed the scale-filling job in a tranquil environment to get effective results.

### 3.4 Statistical analysis

The present study used SPSS (version 21) for the statistical analysis. To determine the impact of physical and psychological activities on the psychological stress of selected male sports players, the psychological data scales were repeated pre and post-experiment in the context of every involved group. Set value $p < 0.05$ was considered to be significant and was represented by "*" while $p < 0.01$ was considered to be extremely significant and was represented by "**" (Liu & Wang, 2021)

## 4. Results

Table 1 presents descriptive statistics and results of paired t-tests in the context of control and experimental groups. For this purpose, the psychological stress dimensions were measured. Results obtained after 12 weeks of psychological activity have shown significant differences in different psychological stress dimensions, which include development ($p$= 0.012), life events ($p$= 0.002), social contact ($p$= 0.015), life ($p$= 0.031) and family ($p$= 0.0001), as the values of $p$ were less than 0.05 in these cases. However, after 12 weeks of physical activity, certain significant differences are also observed in the context of different psychological stress dimensions, which include

social ($p$= 0.001), development ($p$= 0.036) and family ($p$= 0.035). However, in the mixed group, including physical and psychological activities, a significant difference was observed in negative events ($p$= 0.006).

**Table 1**

*Paired sample t-test and Descriptive statistics for control and experimental groups*

| PSD | CG | | | PsAG | | | PAG | | | MG | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | BT | AT | t | BT | AT | t | BT | AT | t | BT | AT | t |
| St | 51.3±7.1 | 49.8±7.1 | 1.15 | 52.8±8.1 | 50.4±7.7 | 2.48 | 46.7±7.2 | 47.3±6.2 | 0.03 | 44.7±7.2 | 46.1±5.8 | 1.52 |
| Lif | 52.5±8.4 | 52.4±7.2 | 0.61 | 5.3±7.2 | 47.5±6.5 | 2.28* | 46.7±8.4 | 46.7±7.7 | -0.01 | 45.3±6.1 | 46.6±6.4 | -1.62 |
| Dev | 49.8±7.2 | 40.6±5.7 | 1.88 | 48.4±6.7 | 44.5±4.2 | 2.65* | 48.1±7.2 | 45.1±6.6 | 2.16* | 44.6±4.1 | 44.6±3.7 | -0.06 |
| SC | 47.6±6.1 | 45.6±3.7 | 1.54 | 47.8±5.1 | 44.6±5.0 | 2.57* | 46.1±6.7 | 42.2±3.8 | 3.34** | 42.8±4.7 | 43.1±5.3 | -0.26 |
| Fam | 48.8±6.5 | 45.3±3.7 | 3.27* | 49.4±5.1 | 43.3±3.3 | 5.00** | 46.7±9.5 | 43.4±6.8 | 2.18 | 43.2±3.6 | 42.2±2.4 | 1.46 |
| PE | 49.7±8.1 | 46.6±7.7 | 1.82 | 51.4±11.5 | 48.6±7.4 | 1.51 | 47.6±7.7 | 47.2±6.4 | 0.43 | 47.4±9.1 | 47.8±7.1 | -0.24 |
| NE | 47.2±6.0 | 43.7±3.4 | 0.32 | 48.3±4.8 | 45.1±4.1 | -0.17 | 45.8±7.4 | 43.3±5.4 | -0.78 | 43.8±4.1 | 44.1±4.1 | -2.87** |
| LE | 49.8±7.4 | 47.4±5.7 | 1.71 | 50.3±7.1 | 45.1±4.1 | 3.92** | 47.5±7.1 | 45.2±5.8 | 1.81 | 44.3±4.4 | 44.4±3.3 | -0.11 |
| DT | 50.6±6.5 | 45.5±6.1 | 1.93 | 49.3±5.1 | 47.3±6.4 | 1.63 | 45.8±7.3 | 44.1±5.1 | 1.40 | 43.3±5.4 | 44.2±5.4 | -1.03 |
| TS | 50.2±7.2 | 47.6±5.5 | 2.11* | 50.1±5.8 | 45.8±6.7 | 3.42** | 46.8±7.2 | 44.6±5.3 | 1.76 | 43.7±4.6 | 44.2±4.1 | -0.63 |

*PSD= psychological stress dimensions; CG= control group; PsAG= psychological activity group; PAG= physical activity group; MG= mixed group; BT= before the test; AT= after test; St= study; Lif= life; Dev= development; SC= social contact; Fam= family; PE= positive events; NE= negative events; LE= life events; DT= daily trivia and TS= total score.*

For this study, the intervention of time is considered crucial as it impacts the overall outcomes of the study. Therefore, the variance analysis for the psychological stress dimensions is carried out, and the results are presented in Table 2. The results have shown that time significantly impacted learning ($p$= 0.021). In contrast, it had a very significant impact on life events ($p$= 0.004, social contact ($p$= 0.002), development ($p$= 0.002), negative events ($p$= 0.004) and family ($p$= 0.001) as the value of $p$ was less than 0.01 in these cases. From Table 2, it was observed that physical activity had a significant impact on life events ($p$=0.012), negative events ($p$= 0.048), and family ($p$= 0.016). In contrast, it had a very significant impact on daily chores ($p$= 0.001), social contact ($p$= 0.005), learning ($p$= 0.001) and life ($p$= 0.003). However, the impact of psychological training on development was significant ($p$= 0.042), and the combined impact of physical and psychological activities was significant in the context of daily trivia ($p$= 0.036). The impact of time * physical activity was also found to be significant in the context of the family ($p$= 0.017), daily trivia ($p$= 0.003), negative events ($p$= 0.002), development ($p$= 0.042), learning ($p$= 0.002) and life events ($p$= 0.001). Therefore, the impact of time * psychological activity was found to be significant ($p < 0.05$) and very significant ($p < 0.01$) in the context of development ($p$= 0.047), life events ($p$= 0.001), learning ($p$= 0.001), negative events ($p$= 0.001), family ($p$= 0.002) and daily trivia ($p$= 0.002).

**Table 2**

*Determination of psychological stress in both experimental and control groups (ANOVA)*

| DV | T | PA | PsA | PA*PsA | T*PA | T*PsA | T*PA*PsA |
|---|---|---|---|---|---|---|---|
| St | 5.42* | 15.84*** | 0.12 | 1.8 | 11.01*** | 11.62*** | 0.6 |
| Lif | 0.02 | 10.01** | 1.2 | 2.4 | 11.36*** | 2.3 | 1.2 |
| Dev | 11.32** | 1.1 | 3.25* | 2.2 | 4.24* | 3.06* | 1.6 |
| SC | 11.95** | 7.61** | 0.3 | 2.5 | 1.2 | 2.2 | 2.5 |
| Fam | 21.96** | 5.76* | 1.3 | 2.5 | 5.66* | 7.71** | 2.4 |
| PE | 2.2 | 1.1 | 0.5 | 0.3 | 8.40** | 0.8 | 0.8 |
| NE | 8.24** | 3.93* | 0.2 | 0.8 | 10.52** | 8.26** | 1.1 |
| LE | 8.06** | 6.61* | 1.6 | 1.7 | 13.65** | 8.55** | 1.8 |
| DT | 0.12 | 14.18** | 1.2 | 3.32* | 8.38** | 8.03** | 1.4 |
| TSS | 4.28* | 10.41** | 1.5 | 2.5 | 13.85** | 9.18** | 2.4 |

*DV= dependent variable; PsA= psychological activity; PA= physical activity; St= study; Lif= life; Dev= development; SC= social contact; Fam= family; PE= positive events; NE= negative events; LE= life events; DT= daily trivia; T= time and TSS= total stress score.*

Table 3 displays the straightforward effect analysis. These observations determined that the mixed group had lower mean values for various psychological stress dimensions, including life, daily trivia, development, life events, learning, family, negative events, social contact, and total scores than the psychological group. In contrast, the physical exercise group had lower mean values for daily trivia, life, and overall scores than the control group. In comparison, the psychological activity group had lower mean values for development and family aspects than the control group. These findings demonstrated that the combined effect of physical and psychological activities is more significant than the individual effects of physical and psychological activities.

**Table 3**

*Psychological stress comparison among control and experimental groups*

| PSD | CG (1) | PsAG (2) | PAG (3) | MG (4) | PC |
|---|---|---|---|---|---|
| St | 50.5±1.3 | 51.7±1.1 | 47.2±1.2 | 45.4±1.07 | (4) < (2) (3) |
| Lif | 52.1±1.3 | 49.4±1.1 | 46.7±1.2 | 46.2±1.04 | (3) < (1) |
| | | | | | (4) < (2) |
| Dev | 48.3±1.2 | 46.4±1.3 | 46.5±0.8 | 44.6±0.7 | (2) < (1) |
| SC | 46.7±1.1 | 46.4±0.8 | 44.1±0.7 | 43.1±0.7 | (4) < (2) |
| | | | | | (2) < (1) |
| Fam | 47.2±1.3 | 46.5±1.1 | 45.1±0.8 | 42.5±0.8 | (4) < (2) (3) |
| | | | | | (4) < (2) |
| NE | 45.4±1.2 | 46.6±0.8 | 44.6±0.7 | 44.1±0.7 | (4) < (2) |
| LE | 48.6±1.2 | 47.6±0.8 | 46.3±0.7 | 44.3±0.7 | (3) < (1) |
| DT | 49.6±1.3 | 48.3±1.2 | 45.2±0.8 | 43.8±0.8 | (4) < (2) |
| TS | 49.1±1.2 | 48.2±0.8 | 45.7±0.7 | 44.2±0.7 | (3) < (1) |
| | | | | | (4) < (2) |

*PSD= psychological stress dimensions; CG= control group; PsAG= psychological activity group; PAG= physical activity group; PC= pairwise comparison; AT= after test; St= study; Lif= life; Dev= development; SC= social contact; Fam= family; NE= negative events; LE= life events; DT= daily trivia and TS= total score.*

## 5. Discussion

Yet, athletes with primary angle glaucoma are more likely to endure emotional distress due to heightened competition. This study contributes to our knowledge of how psychological and physical activities influence athletes with primary angle glaucoma mental stress. For this purpose, an experimental study was conducted using 115 athletes from several public high schools in Iraq. After 12 weeks of the experimental approach, the psychological and physical groups greatly altered the context of numerous areas of psychological stress, including growth, socialization and life, overall scores, living conditions, and families, according to the results of this study. To prevent undue stress on the selected individuals, the intensity of the physical activities was kept between moderate and low. According to the findings of this study, a combination of physical and psychological activities is required to reduce psychological stress in players with primary angle glaucoma.

Bernátová et al. (2020) found that psychological training considerably improves the mental health levels, psychological traits, adaption, interpersonal relationships, emotion regulation, and self-improvement of college students over time. According to Wang, Li, and Qin (2021), an individual's, the social system's, and the biological tissue system's capacity to deal with or adjust to external stress is surpassed. This occurs when individuals cannot modify their requirements in response to a perceived or evaluated threat (Lin et al., 2021). Zhu et al. (2018) emphasized the most current studies on the effects of exercise on the intraocular pressure, ocular perfusion, neuroprotection, and mental health of glaucoma patients. Although the study's limitations, such as an open-ended search strategy, hazy inclusion and exclusion criteria, and biased inclusions, cannot be avoided, this analysis provides a comprehensive, thorough, and extended viewpoint. This information may aid clinicians in caring for their patients by providing a basic grasp of which types of exercise should be encouraged and which should be opposed in glaucoma.

In a prospective observational study, Meier et al. (2018) evaluated the associations between glaucoma incidence and physical activity and cardiorespiratory fitness (hence fitness). 128 instances of recurrent glaucoma were observed during a mean follow-up duration of 5.7 years. Individuals who met the physical activity requirements of 500 equivalent metabolic minutes (MET-min) per week had a significantly lower incidence of incident glaucoma than sedentary adults (0 MET-min/week). Individuals with good fitness (upper third) had a significantly lower incidence of incident glaucoma than those with low fitness (lower third) (bottom third). A combination evaluation of physical activity and endurance found that adhering to physical activity guidelines and belonging to a high-fitness group was associated with the lowest risk of developing glaucoma. These figures provide epidemiological evidence that adhering to the prescribed amounts of physical exercise or being physically fit reduces the risk of developing glaucoma. When fitness was further accounted for in studies of physical activity and glaucoma, the incidence decline was somewhat reduced but remained significant. Nevertheless, the association was no longer significant when physical exercise was further adjusted to the studies for endurance and glaucoma. Although aerobic

physical activity is the most important component in determining fitness, physical activity modifies the relationship between fitness and glaucoma.

Gross et al. (2018) compared the Mindfulness-Acceptance-Commitment (MAC) technique to standard Psychological Skills Training (PST) for enhancing female collegiate athletes' mental health and athletic performance. When MAC participants demonstrated a reduction in generalized anxiety, eating worries, and psychological discomfort from post-intervention to one-month follow-up, some variances within the group were evident. According to coach assessments, MAC participants' sports performance rose pre-and post-intervention. According to the outcomes, the MAC appears to be an effective intervention for addressing female collegiate athletes' mental health and physical performance demands.

Moreno-Montañés et al. (2018) conducted to establish suggestions for patients Using the published scientific findings as a guide. Some sports and activities may influence the development or progression of glaucoma. Glaucoma experts should be well-trained in the published information to give patients the best possible counsel. As there is a dearth of research in this field or just a little quantity of evidence consisting of very few cases or short-term follow-ups, the study of glaucoma-related activities and behaviors yields a broad variety of outcomes. When patients question their capacity to engage in particular activities, we must offer advice to prevent the condition from deteriorating. When it comes to sports, it is generally advisable to exercise and improve one's overall health to enhance systemic circulation.

## 6. Research Implications

### 6.1 Theoretical Implications

The current research will significantly contribute to the literature review on the effects of psychological and physical activities on the psychological stress of athletes with primary angle glaucoma. This study also contributes to developing an effective theoretical framework that might be useful for many linked parties. The present study's findings may be useful for motivating future research in this setting. Practically no experimental research has been undertaken in this context; thus, the present study will be one of the first to determine the effect of psychological and physical activities on the psychological stress of players with primary angle glaucoma.

### 6.2 Practical Implications

This study will increase the awareness of school and hospital administrators on the value of psychological training for enhancing the physical performance of athletes with primary angle glaucoma. This may also inspire these athletes to enhance their physical activity to remain physically fit. This strategy may also be beneficial in maintaining their social engagement. Thus, additional health-related and educational measures might be implemented to encourage psychological and physical activities among players with primary angle glaucoma.

## 7. Limitations and Future Research

Every research project has both benefits and drawbacks. Even if the present work efficiently addresses the constraints of previous research, it still has other flaws that future researchers might exploit. A disadvantage of this study is that it was an experimental study, and no qualitative analysis was undertaken to determine the respondents' in-depth experiences. This research strategy was utilized owing to time constraints. Due to researcher bias, the present study focused solely on male athletes with primary angle glaucoma and ignored female athletes. This study was limited to Iraqi athletes because of their accessibility.

To address these constraints, future research might use a qualitative approach and interview the targeted demographic to gain a deeper understanding of their experiences. Future research might also compare the performance of male and female players in this regard. This research study should also be undertaken in other nations to acquire effective results.

## 8. Conclusion

Physical activity and psychological training can boost people's possibilities for social connection, stimulate them to participate in community events actively, teach them how to communicate with others, improve their mood, and alter their worldview. Consequently, the combined benefits of physical activity and psychological training should be implemented. In this experiment, the moderate-intensity basketball exercise group has a greater influence on life factors, daily tasks, and total scores than the control group. The psychological training group outperformed the control group regarding positive growth and familial features. When paired with moderate basketball play, psychological training aids players in coping with psychological strain, and its positive adaption impact is significantly greater than other techniques for lowering psychological pressure in athletes. Psychological training aids athletes in coping with psychological strain and has a considerably greater adjusting impact than physical exercise or psychological training alone. Also, regular basketball activity aids the

practitioner in coping with psychological stress. Other stress management solutions for athletes must fulfill extra criteria. College students may be able to participate more actively in events and improve their social skills, attitudes, and outlook on life through the combination of physical activity and psychological counseling. Psychological training can considerably reduce the psychological pressure of the growth component. The favorable regulating effects of moderate-intensity workouts plus psychological training are favored over physical exercise or psychological treatment alone for coping with emotional stress.

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