

## A Brief Mindfulness Therapy for Managing Sports Anxiety in Women Hockey Players

Anupama, N. and Gayatridevi, S.

Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

Any type of sport is competitive and can make the players anxious when they are playing or even before that. The aftermath of the game can make players feel anxious. In this study an investigation is done on the performance anxiety in Women Hockey Players. Sixty Women Hockey Players from Bengaluru were randomly selected, and Performance Anxiety Questionnaire was administered on them. Thirty-five participants with high performance anxiety were given Mindfulness Based Therapy. After a month, the participants were administered with the same questionnaire. The result showed that physiological, anxiety, and distracting symptoms of performance anxiety varied between the players. The hockey player's sports anxiety decreased due to Mindfulness Based Therapy.

**Keywords:** Mindfulness Based Therapy, Performance Anxiety, Somatic, Worry, Concentration Disruption, and Women Hockey Players

The field of Sports Psychology deals with the application of psychological theories to competitive physical activity. The sport psychologist is interested in the highs and lows of the athletes and wants to see them all succeed. Boosting the young athlete's ability to self-regulate and increasing self-confidence leads to better overall performance (Ramakrishnan et al., 2015). The effects of anxiety on athletic performance have long piqued the interest of coaches, athletes, and academics. Everyone who has ever watched or participated in a sporting event knows that one athlete can "peak" at the right time while another can falter or "choke" due to emotional and motivational variables.

There are additional outcomes that anxiety influences. Some kids stop participating in sports because they view athletic competitions as something to be avoided rather than enjoyed. Medical professionals and coaches have observed that athletes who are nervous about competing have a higher risk of injury and/or a lengthier recovery time after an injury (Fehm & Schmidt, 2006). Performance Anxiety has been around as long as there has been artistic performance, but it has only been the subject of

serious psychological study in the last several decades. The key features are:

1. Delusions of grandeur, perfectionism, or irrationality
2. Outward manifestations of anxiety, such as shakiness, rapid breathing, or palpitations

Some people's personalities make them shy away from public displays of talent like performances and auditions.

For the most comprehensive analysis of professional musicians' health, see the ICSOM research (Fishbein et al., 1988). Sixteen percent of the subjects reported that performance anxiety severely hindered their ability to do their best which resulted in being the number one mental health problem. Sadly, only a single measure of performance nerves was considered. Studies with smaller number of participants and more sophisticated performance anxiety measures found even higher prevalence rates of professionals experiencing distressing levels of the condition.

Bray and Martin (2003) explored the effect of venue on the performance and mental preparation of athletes in individual sports. The results displayed that athletes' viewpoints

change in individual sports competitions and highlighted the necessity for further investigation into the connection between game site and competitors' mental states. Effects of trait anxiety on directed interpretations of state responses were investigated by Hanton, Mellalieu and Hall (2002), and the multidimensional competitive anxiety was analyzed (State Trait Anxiety). The results presented that directed interpretations are crucial in recognizing total state anxiety symptoms in perceptually demanding sports. Three professional flat racing jockeys were studied by Callow and Waters (2005), who investigated the effect of kinesthetic imagery on their sport confidence and the correlation between performance and sport confidence. The results proved the effectiveness of kinesthetic imagery as a tool for athletes to hone their skills and gain self-assurance.

Among adolescents, the incidence of anxiety disorders varies between 6% and 20%, with the prevalence of anxiety symptoms that do not meet criteria for a specific anxiety disorder being much greater. The rate of occurrence is significantly higher in females. The stress levels of women who compete in sports might range from moderate to high (Patel et al., 2010).

Mindfulness and Acceptance Based Practice Models have been successfully implemented in sport and performance practice domains around the world since they were first conceptualized and applied in sport to improve athletes' and performers' performance and overall well-being (Frank, Gardner & Moore, 2017).

Bhagirathi (2008) conducted a study on ten female hockey players' anxiety, motivation, and ability to stick to their goals. The subjects from different schools in Madhya Pradesh, India, between the ages of 14 and 19 were selected for the study. The results showed a substantial correlation between state anxiety (0.90) and trait anxiety (0.84) and goal-keeping performance, but not accomplishment motivation. There was a statistically significant link between motivation, anxiety, and skill performance for hockey team players (Abd-El Wahab, 2016).

One of the main tenets of the Mindfulness Intervention is teaching athletes to recognize negative emotions and thoughts, accept them,

and then let them go, which helped them recognize and release stress and tension while competing. Age was a powerful predictor of post intervention sport anxiety, even though there were no significant differences between ages (Noetel et al., 2019).

A research study surveyed mindfulness training programme would affect both the endurance performance and executive functions of athletes. Applying a quasi-experimental design, 46 university athletes were recruited and assigned into a 5-week mindfulness training programme or a waiting list control group. In addition, Event Related Potentials (ERPs) associated with the Stroop task were assessed to investigate the potential electrophysiological activation associated with the mindfulness training. For each participant, the mindfulness level, endurance performance assessed by a graded exercise test, executive functions assessed via Stroop task, and N2 component of ERPs were measured prior to and following the 5 weeks intervention. After adjusting for the preintervention scores as a covariate, it was found that the post intervention mindfulness level, exhaustion time, and Stroop task accuracy scores, regardless of task condition, of the mindfulness group were higher than those of the control group. The mindfulness group also exhibited smaller N2 amplitude than the control group. These results suggested that the 5-weeks mindfulness programme can enhance the mindfulness level, endurance performance, and multiple cognitive functions, including executive functions of university athletes (Nien et al., 2020).

## Method

### Objectives

1. To assess the level of Sports Anxiety among Women Hockey Players
2. To find out the efficacy of Mindfulness Therapy in reducing Sports Anxiety among Women Hockey Players

### Operational Definitions

*Sports Anxiety:* It is a tendency to view competitive situations as threatening and to respond to these situations with apprehension and tension (Martens, Vealey & Burton, 1990).

Sattar and Hussain (2020) defined the three dimensions of sports anxiety as follows:

- i. Somatic anxiety involves physiological aspects of arousal, particularly muscle tension and stomach discomfort.
- ii. Worry is defined as negative concerns about potential negative personal and social consequences of poor performance.
- iii. Concentration disruption involves difficulties in focusing on task-relevant cues and thinking clearly in the competitive situation.

*Hockey* is a sport in which two teams play against each other by trying to manoeuvre a ball or a puck into the opponent's goal using a hockey stick.

*Youth*: The youth with the age range of 15 – 25 years are considered as having high risks of performance in the play.

*Mindfulness*: It is a type of meditation in which a person focuses attention on his or her breathing and thoughts, feelings and sensations are experienced freely as they arise (APA Dictionary of Psychology).

### **Hypotheses**

- H1: There will be significant differences in before, after and follow-up phases of mindfulness therapy in somatic dimension of Performance Anxiety among Women Hockey Players
- H2: There will be significant differences in before, after and follow-up phases of mindfulness therapy in worry dimension of Performance Anxiety among Women Hockey Players
- H3: There will be significant differences in before, after and follow-up phases of mindfulness therapy in concentration disruption dimension of Performance Anxiety among Women Hockey Players
- H4: There will be significant differences in before, after and follow-up phases of mindfulness therapy in performance anxiety among Women Hockey Players

*Sample*: Sixty Women Hockey Players from Shanthy Nagar Hockey Stadium, Bangalore,

out of which only 35 were screened positive for sports anxiety and received the mindfulness intervention programme.

*Research Design*: It used a Single Group Design without a Control Group.

### **Inclusion Criteria**

Participants in the age range of 15-25 years

Participants who can read and write either English or the Regional Language.

### **Exclusion Criterion:**

Participants suffering with psychological problems are excluded.

*Tools Description*: The tools used for the study are as follows:

*Case Study Schedule*: It was developed for the study to collect the data relating to socio demographic details, the issues that cause distress such as health, family, financial problems, interpersonal relationships, and factors contributing to sports performance.

*Sports Anxiety Scale – 2 (SAS)*: It was developed by Smith, Smoll, Cumming, Grossbard et al. (2006). It has 15 items which is a multidimensional measure of cognitive and somatic trait anxiety in sport performance settings yielding three separate subscales for Somatic Anxiety, Worry, and Concentration Disruption. The scale reliably predicts pre competition state anxiety scores and has proved sensitive to anxiety reduction interventions directed at youth sport coaches and parents.

*Somatic Anxiety*: Somatic Anxiety manifests some of the symptoms such as stomach-ache, headache, fatigue, sweating etc. in a physical way. This subscale of sports anxiety measures certain aspects of anxiety namely stomach upset, feeling bodily tension and muscles feeling shaky and tight out of nervousness (Smith, Smoll, Cumming & Grossbard, 2006).

*Worry*: Worry is the state or feeling of anxiety and unhappiness caused by the problems that you have or by thinking about unpleasant things that might happen. In respect to sports, this subscale of sports anxiety measures certain aspects of anxiety namely worrying, not playing well, letting others down, playing badly and

messing up during the game (Smith, Smoll, Cumming & Grossbard, 2006).

**Concentration Disruption:** It is the process of diverting the attention from a desired area of focus and thereby blocking or diminishing the reception of desired information. This subscale of sports anxiety measures certain aspects of anxiety namely getting hard to concentrate and focus on the game (Smith, Smoll, Cumming & Grossbard, 2006).

**Mindfulness Script:** It is a script-based intervention which comprises of breathing exercises and mindfulness of thoughts. It was administered before, after and follow-up phases by the researcher and an audio was recorded of the same mindfulness script which was given to the players for everyday use.

### **Intervention Programme**

#### **Mindfulness Script**

The intervention programme was conducted in three phases for the hockey players. The stage of intervention is described in the following phases of the study.

**Phase 1 - Screening and Selection:** After obtaining the permission from the sports authorities, the selected participants were administered by Sociodemographic data and Sports Anxiety Scale was administered. The participants were selected for the intervention based on high scores in sports anxiety.

**Phase 2 - Before Intervention:** Initially the players were explained about the significance and benefits of practicing mindfulness in sports and the mindfulness intervention was administered. The script-based intervention was orally directed by the researcher to the players for 15 to 20 minutes in a comfortable posture. Then the recorded audio of the same mindfulness script was given to the players for practicing daily both at home and on the playground. Weekly telephonic/online follow-ups were made to address their compatibility with the audio recording and help them in practicing it. Four sessions were given after the first assessment; each session was conducted on every weekend based on their available time schedules.

**Phase 3 – After Intervention:** Subsequently at the end of fourth session, the participants were reassessed by Sports Anxiety Scale. A repeated session of intervention was given for verifying their level of understanding and applicability in their routine life events. Once again, the same sessions for four weeks were implemented through the next month on every weekend based on their availability. Weekly telephonic/online follow-ups were made to help them in their practice of the intervention.

**Phase 4 – Follow-up:** After one month, the participants were reassessed by Sports Anxiety Scale. The obtained data was scored and statistically analyzed.

### **Precautions**

- i. Ensure that all the responses given by the participants are honest and spontaneous.
- ii. Maintaining good rapport with the participants.
- iii. Ensure that participants can clarify their doubts if any before responding.
- iv. Participants were assured confidentiality will be maintained.
- v. Distractions are kept to a minimum.

### **Analysis of Data**

- The data was analyzed using the SPSS + Package.
- Descriptive statistics was used to analyze sociodemographic data.
- Repeated Measures of ANOVA were used to assess differences between the dimensions of Performance Anxiety.

### **Benefits of the study**

- It mainly encourages the Women Hockey Players to manage their level of Performance Anxiety and increase their interest towards the Play.
- The participants became aware about the extent to which the Performance Anxiety is affecting their Performance in Sports.
- It helped those players who had higher level of Performance Anxiety to reduce and proceed in their aim to achieve.

- It provides focus point for Achievement and Excellence.

**Results and Discussion**

The Sports Anxiety Scale was administered for 60 Women Hockey Players from Bengaluru Hockey Stadium. Only thirty-five participants had high performance anxiety and they were in the age group of 15 to 25 years. The data is analysed, tabulated, and discussed below.

**Table 1. Sociodemographic details of the Women Hockey Players (N = 35)**

| Variables                     |                      | Fre-<br>quency | Percent |
|-------------------------------|----------------------|----------------|---------|
| Age                           | 15-19                | 29             | 83      |
|                               | 20-23                | 6              | 17      |
| Education                     | +2                   | 24             | 69      |
|                               | Degree               | 11             | 31      |
| Religion                      | Hindu                | 35             | 100     |
| Total Family Members          | 3 Members            | 7              | 20      |
|                               | 4 Members            | 15             | 43      |
|                               | 5 Members            | 8              | 23      |
|                               | 6 Members            | 3              | 8       |
|                               | 7 Members            | 2              | 6       |
| Siblings                      | 1 Sibling            | 22             | 62      |
|                               | 2 Siblings           | 7              | 20      |
|                               | 3 Siblings           | 3              | 9       |
|                               | No Siblings          | 3              | 9       |
| Family Type                   | Nuclear              | 3              | 9       |
|                               | Extended             | 24             | 68      |
|                               | Joint                | 7              | 20      |
|                               | Single Parent        | 1              | 3       |
| Total Family Income per annum | Rs. 10,000-1,50,000  | 22             | 62      |
|                               | Rs.1,51,000-4,00,000 | 3              | 9       |
|                               | Not Mentioned        | 10             | 29      |

Percentages are rounded off.

Table 1 shows the sociodemographic data of the Women Hockey Players. Most of the participants were in the age range of 15 to 19 years, +2 Educated, belongs to a four members family, and had one sibling; extended family type, and per annum income was below Rs.1,50,000.

**Table 2. Mean and Standard Deviation of Women Hockey Players during Before, After and Follow-up phases of Mindfulness Therapy in the Somatic Dimension of Performance Anxiety (N=35)**

| Dimension | Phases    | Mean  | Standard Deviation |
|-----------|-----------|-------|--------------------|
| Somatic   | Before    | 10.06 | 2.70               |
|           | After     | 7.34  | 1.66               |
|           | Follow-up | 7.03  | 1.96               |

Table 2 shows the mean and standard deviation scores of women hockey players during before, after and follow-up phases of mindfulness therapy on somatic dimension of Performance Anxiety. The value clearly indicates that there was a higher performance anxiety (10.06) found in the hockey players before the intervention programme and after intervention it was reduced to 7.34 and it further reduced in the follow-up phase. Hence, it becomes essential to teach mindfulness therapy to women hockey players to manage their somatic anxiety and deal effectively with the hurdles coming in the way of performance.

Table 3 displays the results of Repeated Measures ANOVA for somatic dimension of performance anxiety during before, after and follow-up phases of intervention among women hockey players. Mindfulness training was very useful to reduce problems such as pain, stress, anxiety, and other disorders. The results also proved that mindfulness-based interventions seem to be appropriate for the control of Somatic Anxiety of Women Hockey Players. Hence the Hypothesis “There will be significant differences in Before, After and Follow-up Phases of Mindfulness Therapy in Somatic Dimension of Performance Anxiety among Women Hockey Players” is accepted.

Table 4 depicts the Bonferroni post-hoc analysis for somatic dimension of performance anxiety in before, after and follow-up phases of mindfulness therapy. Based on the significant reduction in the level of somatic anxiety, the pairwise comparison analysis was carried out to identify the differences between pairs of mean and it was significant.

**Table 3. Repeated Measures of ANOVA during Before, After and Follow-up phases of Mindfulness Therapy on the Somatic Dimension of Performance Anxiety in Women Hockey Players (N=35)**

| Phases             | Sum of squares | df    | Mean Square | F        |
|--------------------|----------------|-------|-------------|----------|
| Sphericity Assumed | 194.114        | 2     | 97.057      | 21.07 ** |
| Greenhouse Geisser | 194.114        | 1.652 | 117.48      | 21.07 ** |
| Huynh-Feldt        | 194.114        | 1.726 | 112.47      | 21.07 ** |
| Lower-bound        | 194.114        | 1.000 | 194.11      | 21.07 ** |

\*\* = Significant at 0.01 level

**Table 4. Bonferroni Post-hoc analysis of Before, After and Follow-up phases of Mindfulness Therapy among Women Hockey Players in Somatic Dimension of Performance Anxiety (N=35)**

| Dimension | Condition | Phase     | Mean Difference | Standard Error |
|-----------|-----------|-----------|-----------------|----------------|
| Somatic   | Before    | After     | 2.71*           | 0.57           |
|           |           | Follow-up | 3.03*           | 0.58           |
|           | After     | Before    | -2.71*          | 0.57           |
|           |           | Follow-up | 0.31            | 0.38 N.S.      |
|           | Follow-up | Before    | -3.03*          | 0.58           |
|           |           | After     | -0.31           | 0.38 N.S.      |

\* = Significant at 0.05 level, N.S. = Not Significant

**Table 5. Mean and Standard Deviation of Women Hockey Players during Before, After and Follow-up phases of Mindfulness Therapy in the Worry Dimension of Performance Anxiety (N=35)**

| Dimension | Phases    | Mean  | Standard Deviation |
|-----------|-----------|-------|--------------------|
| Worry     | Before    | 10.46 | 2.14               |
|           | After     | 8.46  | 2.46               |
|           | Follow-up | 8.74  | 3.05               |

Table 5 shows the mean and standard deviation scores of women hockey players during before, after and follow-up phases of mindfulness therapy on worry dimension of Performance Anxiety.

Table 6 exhibits the results of Repeated Measures ANOVA for worry dimension of

performance anxiety during before, after and follow-up phases of intervention among women hockey players. Mindfulness training was very effective in reducing worries. The results also proved that mindfulness-based interventions seem to be appropriate to control worries which are attributed in context to the sports events of women hockey players. Hence the Hypothesis "There will be significant differences in Before, After and Follow-up Phases of Mindfulness Therapy in Worry Dimension of Performance Anxiety among Women Hockey Players" is accepted.

Table 7 illustrates the Bonferroni post-hoc analysis for worry dimension of performance anxiety in before, after and follow-up phases of mindfulness therapy. Based on the significant

**Table 6. Repeated Measures of ANOVA during Before, After and Follow-up phases of Mindfulness Therapy in Worry Dimension of Performance Anxiety among Women Hockey Players (N=35)**

| Phases             | Sum of squares | df    | Mean Square | F       |
|--------------------|----------------|-------|-------------|---------|
| Sphericity Assumed | 81.905         | 2     | 40.952      | 6.85 ** |
| Greenhouse Geisser | 81.905         | 1.868 | 43.847      | 6.85 ** |
| Huynh-Feldt        | 81.905         | 1.972 | 41.524      | 6.85 ** |
| Lower-bound        | 81.905         | 1.000 | 81.905      | 6.85 ** |

\*\* = Significant at 0.01 level

**Table 7. Bonferroni Post-hoc analysis of Before, After and Follow-up phases of Mindfulness Therapy among Women Hockey Players in Worry Dimension of Performance Anxiety (N=35)**

| Dimension | Condition | Phase     | Mean Difference | Standard Error |
|-----------|-----------|-----------|-----------------|----------------|
| Worry     | Before    | After     | 2.00*           | 0.51           |
|           |           | Follow-up | 1.71*           | 0.64           |
|           | After     | Before    | -2.00*          | 0.51           |
|           |           | Follow-up | - 0.29          | 0.60 N.S.      |
|           | Follow-up | Before    | -1.71*          | 0.64           |
|           |           | After     | 0.29            | 0.60 N.S.      |

\* = Significant at 0.05 level, N.S. = Not Significant

reduction in the level of worry, the pairwise comparison analysis was carried out to identify the differences between pairs of mean which are significant.

**Table 8. Mean and Standard Deviation of Women Hockey Players during Before, After and Follow-up phases of Mindfulness Therapy in the Concentration Disruption Dimension of Performance Anxiety (N=35)**

| Dimension                | Phases    | Mean | Standard Deviation |
|--------------------------|-----------|------|--------------------|
| Concentration Disruption | Before    | 8.91 | 2.38               |
|                          | After     | 7.86 | 2.13               |
|                          | Follow-up | 7.83 | 2.17               |

Table 8 analyses the mean and standard deviation scores of women hockey players during before, after and follow-up phases of mindfulness therapy on concentration disruption dimension of Performance Anxiety. The scores indicate that there was a higher performance anxiety found in the hockey players before the intervention programme (8.91) and it reduced to 7.86 after intervention and it slightly reduced to 7.83 in the follow-up phase.

Table 9 depicts the results of Repeated Measures ANOVA for concentration disruption dimension of performance anxiety during before, after and follow-up phases of intervention among women hockey players. Mindfulness intervention really helps managing distractions and enriches to focus on determined performance. The results proved that mindfulness-based interventions had not reduced the disruptions related to the sports events of women hockey players. Hence the Hypothesis “There will be significant differences in Before, After and Follow-up Phases of Mindfulness Therapy in Concentration Disruption of Performance Anxiety among Women Hockey Players” is rejected.

Table 10 illustrates the Bonferroni post-hoc analysis for Concentration Disruption dimension of performance anxiety in before, after and follow-up phases of mindfulness therapy. The pair wise comparison analysis was carried out to identify the differences between pairs of mean. The mean difference between before, after and follow-up phases were not statistically significant.

**Table 9: Repeated Measures of ANOVA during Before, After and Follow-up Phases of Mindfulness Therapy on the Concentration Disruption Dimension of Performance Anxiety in Women Hockey Players (N=35)**

| Phases             | Sum of squares | df    | Mean Square | F         |
|--------------------|----------------|-------|-------------|-----------|
| Sphericity Assumed | 26.800         | 2     | 13.400      | 3.73 N.S. |
| Greenhouse Geisser | 26.800         | 1.980 | 13.538      | 3.73 N.S. |
| Huynh-Feldt        | 26.800         | 2.000 | 13.400      | 3.73 N.S. |
| Lower-bound        | 26.800         | 1.000 | 26.800      | 3.73 N.S. |

N.S. = Not Significant

**Table 10. Bonferroni Post-hoc analysis of Before, After and Follow-up phases of Mindfulness Therapy among Women Hockey Players in Concentration Disruption Dimension of Performance Anxiety (N=35)**

| Dimension                | Condition | Phase     | Mean Difference | Standard Error |
|--------------------------|-----------|-----------|-----------------|----------------|
| Concentration Disruption | Before    | After     | 1.06            | 0.43 N.S.      |
|                          |           | Follow-up | 1.09            | 0.47 N.S.      |
|                          | After     | Before    | -1.06           | 0.43 N.S.      |
|                          |           | Follow-up | 0.03            | 0.45 N.S.      |
|                          | Follow-up | Before    | -1.09           | 0.47 N.S.      |
|                          |           | After     | -0.03           | 0.45 N.S.      |

N.S. = Not Significant

**Table 11. Mean and Standard Deviation of Women Hockey Players during Before, After and Follow-up phases of Mindfulness Therapy in Performance Anxiety (N=35)**

| Dimension           | Phases    | Mean  | Standard Deviation |
|---------------------|-----------|-------|--------------------|
| Performance Anxiety | Before    | 29.43 | 4.29               |
|                     | After     | 23.66 | 5.01               |
|                     | Follow-up | 23.94 | 5.40               |

Table 11 analysis shows that the mean and standard deviation scores of women hockey players during before, after and follow-up phases of mindfulness therapy on Performance Anxiety. The scores indicate that there was higher performance anxiety found in the hockey players before the intervention programme (29.43) and

it reduced to 23.66 after intervention and it maintained in the follow-up phase.

Table 12 displays the results of Repeated Measures ANOVA for performance anxiety during before, after and follow-up phases of intervention among women hockey players. Mindfulness training is helpful to reduce problems such as pain, worries, stress, anxiety, distractions, etc. The mindfulness-based interventions attribute in reducing performance anxiety with respect to somatic, worries, and concentration disruptions. This form of intervention programme seems to be appropriate for managing performance anxiety in women hockey players. Hence the Hypothesis "There will be significant differences in Before, After and Follow-up Phases in Mindfulness

**Table 12. Repeated Measures of ANOVA during Before, After and Follow-up phases of Mindfulness Therapy on Performance Anxiety in Women Hockey Players N=35**

| Phases             | Sum of squares | df    | Mean Square | F       |
|--------------------|----------------|-------|-------------|---------|
| Sphericity Assumed | 740.648        | 2     | 370.324     | 22.90** |
| Greenhouse Geisser | 740.648        | 1.950 | 379.780     | 22.90** |
| Huynh-Feldt        | 740.648        | 2.000 | 370.324     | 22.90** |
| Lower-bound        | 740.648        | 1.000 | 740.648     | 22.90** |

**Table 13. Bonferroni Post-hoc analysis of Before, After and Follow-up phases of Mindfulness Therapy among Women Hockey Players in Performance Anxiety N=35**

| Dimension           | Condition | Phase     | Mean Difference | Standard Error |
|---------------------|-----------|-----------|-----------------|----------------|
| Performance Anxiety | Before    | After     | 5.77*           | 0.89           |
|                     |           | Follow-up | 5.49*           | 0.98           |
|                     | After     | Before    | -5.77*          | 0.89           |
|                     |           | Follow-up | -0.29           | 1.01 N.S.      |
|                     | Follow-up | Before    | -5.49*          | 0.99           |
|                     |           | After     | 0.29            | 1.01 N.S.      |

\* = Significant at 0.05 level, N.S. = Not Significant



Therapy of Performance Anxiety among Women Hockey Players” is accepted.

Table 13 illustrates the Bonferroni post-hoc analysis for performance anxiety in before, after and follow-up phases of mindfulness therapy. Based on the significant reduction in the level of performance anxiety, the pairwise comparison analysis was carried out to identify which differences between pairs of mean are significant.

### Summary and Conclusion

The results indicated that the level of performance anxiety was high among Women Hockey Players on various dimensions of performance anxiety such as Somatic, Worry, Concentration Disruption and Performance Anxiety. Mindfulness Based Therapy reduced Somatic problems, Worries, and Performance Anxiety and enhanced the women players to focus more on their sports performance.

### Implications

1. Mindfulness Therapy will give 100% results in overcoming Performance Anxiety.
2. Awareness about the Mindfulness Therapy among Players will have long lasting effect since they will continue to provide such a cheerful outlook to upcoming generations and help them to overcome their performance.
3. The results can be shared with the social media to help parents to understand Mindfulness Therapy.

### Limitations

The present study has certain limitations.

- To conduct intervention study among the players, a permanent staff and permanent counsellor needs to be present as currently for this study the interventions are done outside the stadium.
- The participants of the study were restricted only to women hockey players whereas the male players can be included.
- The present study limited to the inclusion of lesser number of participants where

many players would have the benefit of the intervention.

- Due to the practical difficulties, a control group could not be included and hence the role of confounding variables might be present in the study.

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**Anupama, N.**, Ph.D., Research Scholar, Department of Psychology, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore. Email: [anu.anup1986@gmail.com](mailto:anu.anup1986@gmail.com)

**S. Gayatri Devi**, Ph.D., Professor and Head, Department of Psychology, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore. Email: [drgaya1965@gmail.com](mailto:drgaya1965@gmail.com)