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# PSYCHOLOGICAL CHARACTERISTICS OF NATIONAL-LEVEL RIFLE SHOOTING PLAYERS: A CROSS-SECTIONAL STUDY

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**ABSTRACT** **Aim:** The study aimed to study the psychological characteristics of national-level rifle shooting players in Uttar Pradesh, India. **Method:** Thirty national-level male rifle shooting players from India were selected as the subjects for the study. For the study, the questionnaires of trait and state anxiety developed by Charles D. Spielberger, Richard L. Gorsuch, and Robert E. Lushene, locus of control designed by Dr Anand Kumar and S. N. Srivastava, and stress by Miller and Allen were used. Descriptive statistics were applied to describe the psychological characteristics of shooters. **Result:** The average locus of control score of 10.13 indicates a moderate internal perspective among the participants. Participants reported an average stress level of 35.33, with a standard deviation of 3.407. The mean anxiety score on the STAI Y-1 scale is 51.03, with a standard deviation of 4.560, and scores ranging from 42 to 60. **Conclusion:** Overall, the findings suggest that while the participants have a moderate internal locus of control and experience mild levels of stress and anxiety, there is variability in individual experiences.

**KEYWORDS :** rifle shooting players, anxiety, stress, locus of control, national, psychological characteristics, questionnaire.

## INTRODUCTION

Sports activity, defined as the practice of numerous athletic disciplines at both the amateur and professional levels, connects the worlds of children, adolescents, and adults (Stepulak, 2014). Shooting sports necessitate accurate, forceful, and coordinated actions of numerous body organs (*ISSF Athlete's Handbook.* International Shooting Sport Federation; Munich, Germany: 2018). It has been consistently established that players frequently choke in high-pressure circumstances because worry impairs attention management and, thus, performance. There are two conflicting theories for explaining the negative anxiety-performance association. Psychological elements like stress and worry can affect physiological parameters, which, therefore, affect shooting performance. According to studies (Beilock & Carr, 2001; Pau et al., 2019), stress and anxiety can alter blood pressure, muscle tension, and heart rate variability, reducing shooting accuracy.

Moreover, it is expected to draw parallels between locus of control theory and causal attribution theory. The locus of control refers to an individual's sense of the root causes of occurrences in their life. Or, more simply, do people feel that the individual or outside forces determine the result of life events? Numerous research has found a negative link between locus of control and anxiety (Rossier et al., 2002, 2009). In a non-sporting setting, it has been proven that there is a positive association between externality variables and anxiety and a negative correlation between internal beliefs and anxiety in health (Lee et al. 2014).

### Methodology

For the study, a total of 30 National level rifle shooting players were selected as the subjects. The trait and state anxiety questionnaires developed by Charles D. Spielberger, Richard L. L. Gorusch and Robert E. Lushene, locus of control designed by Dr Anand Kumar and S. N. Srivastava and stress by Miller and Allen were used. The player's descriptive was applied to describe the psychological characteristics of national-level rifle shooting.

## RESULTS AND FINDINGS

**Table 1: Mean Scores, Standard Deviations, Range, Minimum And Maximum Of National Level Rifle Shooting Players On Three Psychological Variables (N=30)**

| Variables | N | Range | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|---|
| Locus of control | 30 | 16 | 2 | 18 | 10.13 | 3.235 |
| stress | 30 | 12 | 30 | 42 | 35.33 | 3.407 |
| STAI Y-1 Anxiety (S) | 30 | 18 | 42 | 60 | 51.03 | 4.560 |
| STAI Y-2 Anxiety (T) | 30 | 17 | 42 | 59 | 51.53 | 4.329 |

The average locus of control score of 10.13 suggests a moderate internal perspective among participants, implying that they believe they can influence events in their lives. The standard deviation of 3.235 indicates some variation in this belief across the sample, with scores ranging from 2 (showing a more internal locus of control) to 18 (representing a more outward locus of control). This variation could be due to individual differences in coping methods and control attributions over life outcomes.

Participants reported an average stress level of 35.33 and a standard deviation of 3.407. The relatively narrow range of stress scores (30 to 42) shows that stress levels are consistent across the group. This moderate level of stress may imply that participants are under significant stress but not to a severe degree. The consistency of stress levels may also reflect a steady environment or similar stressors encountered by the subjects.

The mean anxiety score on the STAI Y-1 scale is 51.03, with a standard deviation of 4.560. The scores vary from 42 to 60, demonstrating the variety in anxiety levels across people. This scale assesses state anxiety, indicating the individuals' emotional and psychological state. The moderate mean score shows that the group had a significant amount of anxiety, which external stressors or internal psychological causes may have impacted.

On the STAI Y-2 scale, the average anxiety score is slightly higher, 51.53, with a standard deviation 4.329. The scores range from 42 to 59, indicating a similar pattern of variability as STAI Y-1 Anxiety. The tiny increase in mean score from Y-1 to Y-2 may indicate a potential pattern of growing anxiety with time in the sample, though the difference is minor.

### Discussion Of Findings

The average locus of control score of 10.13 indicates a moderate internal perspective among the participants, suggesting that they generally believe in their ability to influence events. However, the variation in scores, with a standard deviation of 3.235 and a range from 2 to 18, highlights individual differences in this belief, which could be attributed to various coping mechanisms and attributions of control over life outcomes.

Participants reported an average stress level of 35.33, with a standard deviation of 3.407. The narrow range of stress scores (30 to 42) indicates a consistent level of stress across the group, suggesting that while the participants are experiencing significant stress, it is not extreme. This consistency could reflect a stable environment or similar stressors the group faces.

The mean anxiety score on the STAI Y-1 scale is 51.03, with a standard deviation of 4.560, and scores ranging from 42 to 60. This indicates a moderate level of state anxiety, reflecting the current emotional and psychological state of the participants. The slightly higher mean score

on the STAI Y-2 scale (51.53, with a standard deviation of 4.329) suggests a potential trend of increasing anxiety over time, though the difference is minor.

## CONCLUSION:

Overall, the findings suggest that while the participants have a moderate internal locus of control and experience mild levels of stress and anxiety, there is variability in individual experiences. This highlights the importance of considering individual differences when addressing psychological well-being and developing interventions to manage stress and anxiety effectively.

## REFERENCES


1. Beilock, S. L., & Carr, T. H. (2001). On the Fragility of Skilled Performance: What Governs Choking under Pressure? Journal of Experimental Psychology: General, 130, 701-725. http://dx.doi.org/10.1037/0096-3445.130.4.701
2. Rossier J, Rigozzi C, Berthoud S. (2002). *Validation de la version française de l'échelle de contrôle de Levenson (IPC), influence de variables démographiques et de la personnalité*. Paper presented at: Annales Médico-psychologiques, revue psychiatrique, 160, 138–148, doi: 10.1016/S0003-4487(01)00111-1
3. Lee M. H., Lee S. A., Lee G. H., Ryu H. S., Chung S., Chung Y. S., et al.. (2014). Gender differences in the effect of comorbid insomnia symptoms on depression, anxiety, fatigue, and daytime sleepiness in patients with obstructive sleep apnea. *Sleep Breath.* 18, 111–117. doi: 10.1007/s11325-013-0856-x
4. Stepulak, M. Z. (2014). Psychologiczny wymiar wy-chowania poprzez sport [Psychological aspects of education through sport]. In P. Mazur (Ed.), Wychowanie poprzez sport. Wielość spojrzeń i do-świadczeń [Education through sport. A multitude of perspectives and experiences] (pp. 29–43). Chełm: PWSZ.
5. ISSF . *ISSF Athlete's Handbook.* International Shooting Sport Federation; Munich, Germany: 2018.