

Winning from Within: Mindfulness, Locus of Control and Perception in Athletes

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ABSTRACT

The purpose of the present study is to explore the relationship between mindfulness, perception, and locus of control in athletes. In the present study, 126 athletes of age group ranging from 18-25 years are selected as participants by applying correlational research design. Mindfulness is assessed by State Mindfulness Scale for Physical Activity-2 (SMS-PA2), Locus of Control is assessed by Rotter's Locus of Control Scale Hindi adaptation, and Perception is assessed by Sports Performance Perception Scale (SPPS). Results of the study reveal that there is no significant difference between males and females regarding mindfulness, locus of control, and perception at .05 levels of significance. It is found that there is a significant positive relationship between mindfulness and perception and a significant negative relationship between locus of control and perception, but no significant relationship is found between mindfulness and locus of control. It is found that there is a stronger relational pattern between mindfulness and perception as well as in locus of control and perception among female athletes. Regression analysis reveal that mindfulness is a significant predictor of perception in the total sample as well as in males and females. This prediction is stronger in female athletes than male athletes. However, mindfulness is not a significant predictor of locus of control. It reveals that perception is a significant predictor of locus of control, and the different components of perception are the predictors in males and females. Thus, the study results support the alternative hypothesis and emphasize the importance of mindfulness in the development of perception and perception in the development of locus of control in athletes.

Keywords: *Mindfulness, Perception, Locus of control, Athletes, Gender differences, Regression analysis, Psychological factors*

Sports involve both physiological and psychological dimensions, including cognitive functions such as attention, perception, emotion regulation, and decision making. Athletes may experience certain psychological pressures like competition, performance anxiety, and fear of failure, whose interpretation can be critical for performance and wellbeing of athletes. Mindfulness is the mental state resulting from being fully present at the moment without judging anything. In this regard, mindfulness makes athletes more

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productive in performing tasks. A study by De Petrillo et al. (2009) reveals that the practice of mindfulness is able to promote attentional focus, diminish sport anxiety, and increase mindfulness among long-distance runners. Likewise, in a study conducted by Aherne, Moran, and Lonsdale (2011), the practice of mindfulness is found to be beneficial for athletes in experiencing flow and maintaining their attentional focus while performing. Moreover, in another study by Baltzell and Akhtar (2014), it is concluded that athletes who possess high degrees of mindfulness showed high attentional control and low cognitive interference.

Figure 1: Major Components of Mindfulness

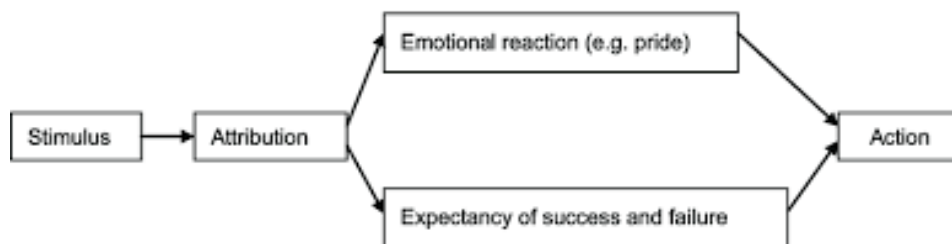


Moreover, one should consider the Mindfulness-Based Stress Reduction (MBSR) model developed by Jon Kabat-Zinn that describes how non-judgmental awareness can reduce the impact of stress and improve emotions regulation in an athlete.

Locus of control is defined by an athlete's views on the causes of events in their lives. The former results in increased motivation, self-confidence, and better coping skills while the latter results in increased stress levels and decreased motivation.

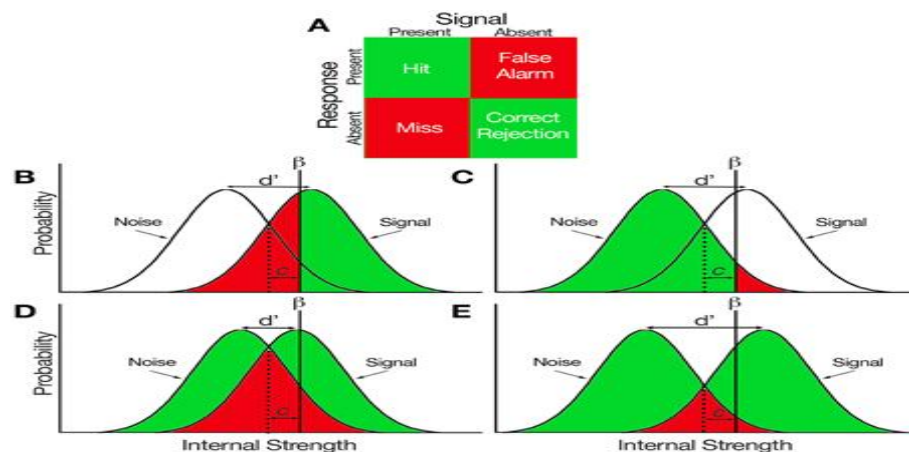
This idea is based on Social Learning Theory by Julian B. Rotter (1966). The theory argues that behavioural actions occur based on two variables – expectancy and reinforcement value. The development of control beliefs is achieved based on experience and outcome perception. Bernard Weiner's Attribution Theory can be applied to explaining the way athletes perceive success and failures. Allen et al. (2011) notes that athletes with internal locus of control shows decreased stress levels and effective coping. In addition to this, Holden et al. (2019) finds that external locus of control is negatively correlated with perceived stress among athletes, which means athletes with an external locus of control are exposed to high levels of stress. Moreover, Qi and Villanueva (2023) discuss that locus of control impacts the choice of coping mechanisms and affects emotions, highlighting the importance of perceived control.

Figure 2: Bernard Weiner's Attribution Theory



Perception refers to the process through which individuals interpret sensory information and make meaning out of it. In sports, perception plays a key role in evaluating performance, understanding the environment, and making quick decisions. Moreover, the Signal Detection Theory provides information about decision making processes during sport events. It shows that the key element of successful performance is distinguishing the relevant and irrelevant stimuli in the sports situation. Efficient perceptual-cognitive skills result in improved and enhanced decision-making speed in athletes, according to Cardoso et al. (2021). The findings of Marcen-Cinca et al. (2022) indicate that athletes who are experts have better visual perception skills than non-experts. The same is observed in the study conducted by Harrison et al. (2023), which reveals that motor expertise is associated with improved perceptual discrimination skills. The neuroimaging study by DeCouto et al. (2024) adds weight to the hypothesis that athletes have unique neural pathways for perceptual processing.

Figure 3: Signal Detection Theory Model



Objectives of the Study

- To measure mindfulness using SMS-PA2
- To assess locus of control using Rotter's Locus of Control Scale
- To evaluate perception using SPPS
- To examine the relationship between mindfulness, locus of control, and perception

Research Hypothesis

- **Alternate Hypothesis:** There is a significant relationship between mindfulness, locus of control, and perception among athletes
- **Null Hypothesis:** There is no significant relationship between mindfulness, locus of control, and perception among athletes

Sample Size

Initially, 123 participants are taken for the study after estimating it through G Power version 3.1.9.4 software. Eventually, the sample size increased to 126 due to the availability of athletes in the campus.

Research Method employed

Survey method is adopted to conduct the present study.

Ethical Clearance

The study is approved by the Institutional Ethics Committee of Guru Nanak Dev University, Amritsar, Punjab (No: 3953/HG, dated 18/6/2025).

Inclusion Criteria

- Athletes aged between 18–25 years
- Minimum one year of sports experience

Exclusion Criteria

- Athletes with diagnosed psychological disorders
- Participants unable to complete the assessment
- Non-athletes

Measurement Tools

- **State Mindfulness Scale for Physical Activity-2 (Ullrich-French, Cox & Houg, 2022)**, to measure experiences of mindfulness when engaging in physical activities. The instrument comprises 19 items that make up four subscales, namely MM, MB, AM, and AB. The instrument measures both the contents of mindfulness and their qualities (i.e., attention and awareness). The measurement is done using the Likert Scale, where responses range from 0 (not at all) to 4 (very much).
- **Rotter's Locus of Control Scale (Rotter, 1966; Hindi Adaptation: Anand Kumar & S.N. Srivastava, 1985)**, Locus of Control Scale is a test of 29 questions made by Rotter in 1966 which is meant to measure the difference between people with internal and external locus of reinforcement control. There are forced choice questions, where the subject must choose either one statement or another. Six questions are fillers in the test.
- **Sports Performance Perception Scale (Adam, Ferguson, Mosewich & Kowalski, 2019)**, Sports Performance Perception Scale (SPPS), designed by Adam, Ferguson, Mosewich, and Kowalski (2019), measures the self-perceived performance perception among athletes. This measure comprises 32 questions divided into five different subscales, namely, Athlete Development (SPPS-AD), Mastery Development (SPPS-MD), Strategy and Preparedness (SPPS-SP), Recovery and Injury Prevention (SPPS-RP), and Psychological Skills (SPPS-PS). Responses can be rated on a scale from 1 ("almost never") to 7 ("almost always").

Procedure

Participants who have qualified based on the inclusion criteria are then told about the purpose of the research as well as the questionnaire. Consent is obtained from each participant to ensure voluntary participation. Thereafter, the participants are asked to complete three scales, namely State Mindfulness Scale for Physical Activity-2 (2022), Rotter's Locus of Control Scale (1966; Hindi Adaptation, 1985) and Sports Performance

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Perception Scale (2019). Any confusion regarding the questionnaire is cleared by the researcher.

Once 126 athletes have been tested, their data is collected, coded, and scored as directed in the manuals. This data is then analysed to determine the relationship between mindfulness and locus of control as well as sports performance perception.

Data Analysis

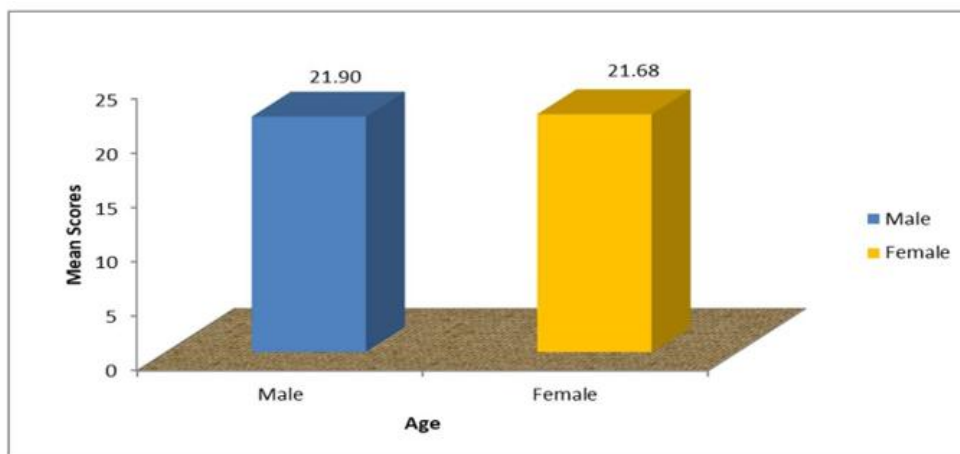
The collected data is tested for statistical significance using Jamovi software version 2.3. The Pearson Correlation test is used for analysis. Regression analysis is done on these variables to predict the impact of mindfulness on locus of control and perception among athletes and vice-versa

RESULTS AND ANALYSIS

Table 1: The Age Frequencies, Mean and Standard Deviation

| AGE | FREQUENCY- MALE | FREQUENCY-FEMALE |
|--------------------|-----------------|------------------|
| 18 | 2 | 0 |
| 19 | 2 | 6 |
| 20 | 15 | 7 |
| 21 | 8 | 9 |
| 22 | 20 | 20 |
| 23 | 5 | 11 |
| 24 | 6 | 6 |
| 25 | 5 | 4 |
| Mean | 21.905 | 21.683 |
| Standard Deviation | 1.6136 | 1.7304 |

Figure 4: Graph depicting Mean scores of distributions of participants by Age and Gender.



From the distribution of the participants' ages, it can be seen that the age range of the sample population comprises athletes ranging from 18 years old to 25 years old. This range shows that 22 years old has the most participants. For female athletes, the average age is 21.905 years while it is 21.683 years for male athletes. The standard deviations are also low at 1.6136 years and 1.7304 years for females and males respectively.

Table 2: The Means and Standard Deviations of the Male and the Female Athletes on all

the measured variables along with their statistical significance of differences between means.

| Variables | Male (N=63) | | Female (N=63) | | t' value | Sig.(2-tailed) | Significance |
|---------------|-------------|----------------|---------------|----------------|----------|----------------|-----------------|
| | Mean | Std. Deviation | Mean | Std. Deviation | | | |
| MM SMS PA2 | 17.619 | 4.8674 | 17.238 | 4.9374 | -0.436 | 0.664 | Not Significant |
| MB SMS PA2 | 18.921 | 5.0427 | 19.079 | 5.194 | 0.174 | 0.862 | Not Significant |
| AM SMS PA2 | 8.254 | 2.8111 | 7.81 | 2.8616 | -0.879 | 0.381 | Not Significant |
| AB SMS PA2 | 11.492 | 2.9341 | 11.063 | 3.0154 | -0.809 | 0.42 | Not Significant |
| TOTAL SMS PA2 | 56.413 | 11.9429 | 54.73 | 13.6632 | -0.736 | 0.463 | Not Significant |
| LOC SCORES | 10.651 | 2.4307 | 11.016 | 2.6058 | 0.813 | 0.418 | Not Significant |
| AD SPPS | 36.175 | 6.4321 | 36.841 | 5.1688 | 0.641 | 0.523 | Not Significant |
| MD SPPS | 44.413 | 10.0204 | 45 | 5.0064 | 0.416 | 0.678 | Not Significant |
| SP SPPS | 43.841 | 7.1419 | 42.889 | 7.5778 | -0.726 | 0.469 | Not Significant |
| RP SPPS | 46.968 | 9.1598 | 46.81 | 10.201 | -0.092 | 0.927 | Not Significant |
| PS SPPS | 25.286 | 3.5895 | 25.825 | 6.0202 | 0.611 | 0.542 | Not Significant |
| TOTAL SPPS | 196.857 | 27.4537 | 197.063 | 25.8381 | 0.043 | 0.965 | Not Significant |

Figure 5: Comparison of Total Mindfulness (SMS-PA2) Scores Across Gender

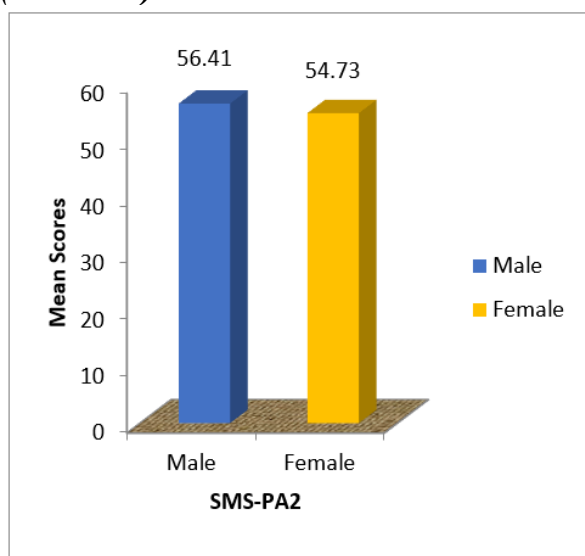


Figure 6: Comparison of Locus of Control Across Gender

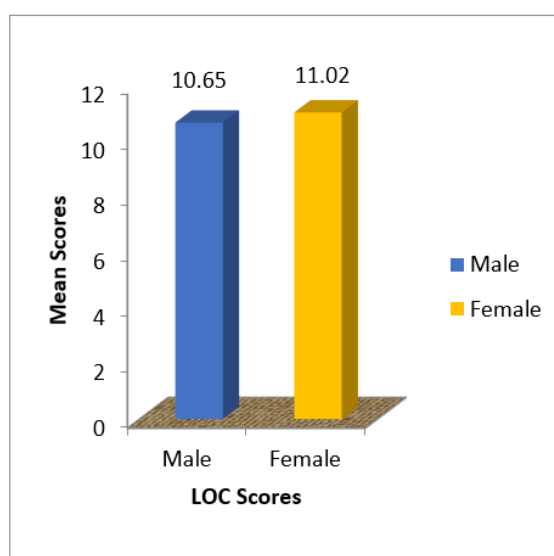


Figure 7: Comparison of Total Sports Performance Perception (SPPS) Scores Across Gender.

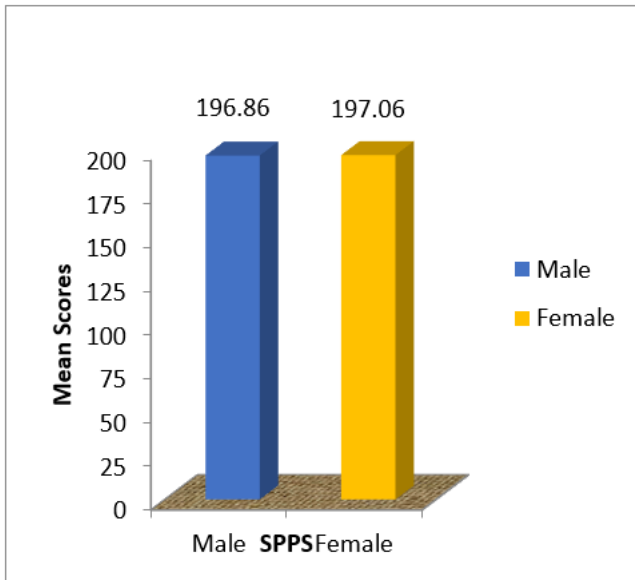


Figure 8: Comparison of Mindfulness (SMS-PA2) dimensions across Gender.

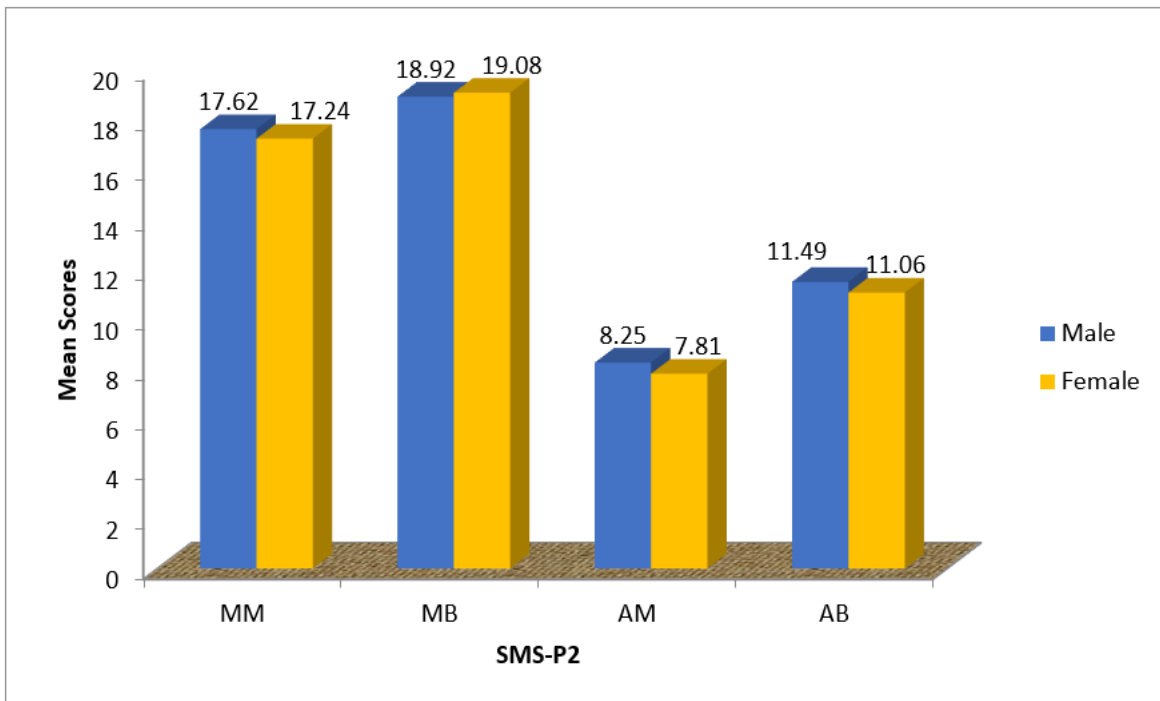


Figure 9: Comparison of Sports Performance Perception (SPPS) dimensions across Gender.

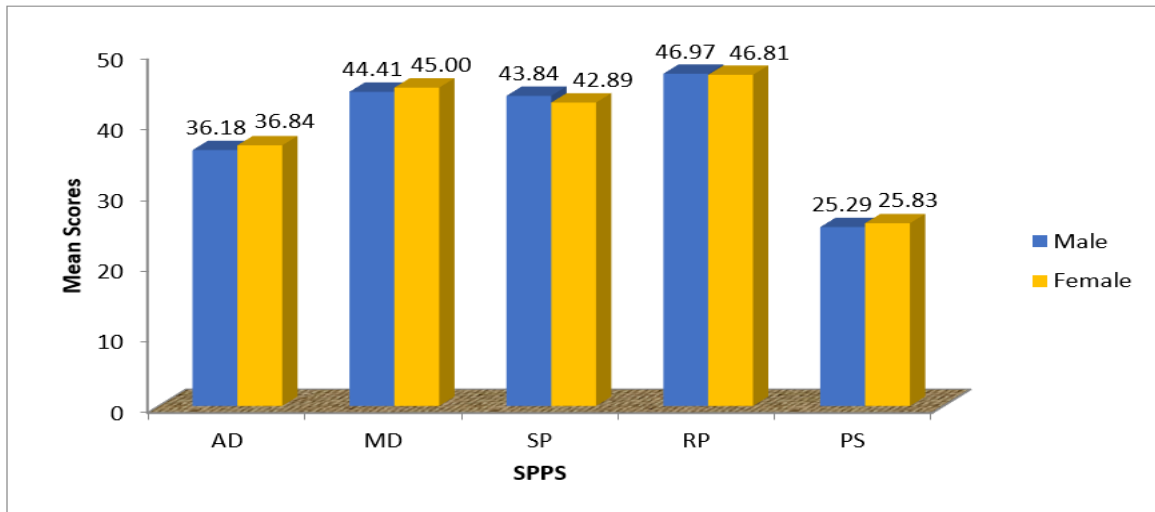


Table 2 provides the data for the comparison of males (N = 63) and females (N = 63) athletes regarding their mindfulness, locus of control, and sports performance perception. As seen from the findings provided in Table 2, there is a slight difference between the mean values of mindfulness, which is characterized by the use of SMS-PA2 scale. Specifically, males have higher mean value (M = 56.413) than females did (M = 54.73). Males score lower (M = 10.651) than females did (M = 11.016).

Table 3: Inter-correlation between Mindfulness, Locus of Control and Perception among Male Athletes.

| | MM SMS PA2 | MB SMS PA2 | AM SMS PA2 | AB SMS PA2 | TOTAL SMS PA2 | LOC SCORE S | AD SPP S | MD SPP S | SP SPP S | RP SPP S | PS SPP S | TOTAL SPPS | AGE |
|---------------|----------------------------------------------|------------|------------|------------|---------------|-------------|----------|----------|----------|----------|----------|------------|-----|
| MM SMS PA2 | Pearson 1 Sig. (2-tailed) . N 63 | | | | | | | | | | | | |
| MB SMS PA2 | Pearson .448 Sig. (2-tailed) .0 N 63 | 1 | | | | | | | | | | | |
| AM SMS PA2 | Pearson .311 Sig. (2-tailed) .001 N 63 | .432 | 1 | | | | | | | | | | |
| AB SMS PA2 | Pearson .297 Sig. (2-tailed) .001 N 63 | .399 | .599 | 1 | | | | | | | | | |
| TOTAL SMS PA2 | Pearson .759 Sig. (2-tailed) .0 N 63 | .796 | .690 | .677 | 1 | | | | | | | | |
| LOC SCORE S | Pearson 0.15 Sig. (2-tailed) .23 N 63 | - | - | - | -0.028 | 1 | | | | | | | |
| AD SPPS | Pearson 0.13 Sig. (2-tailed) .28 N 63 | .336 | .279 | .265 | .316* | -.345** | 1 | | | | | | |
| MD SPPS | Pearson 0.14 Sig. (2-tailed) .27 N 63 | 0.20 | 0.03 | 0.08 | 0.165 | 0.061 | .393 | 1 | | | | | |
| SP SPPS | Pearson .311 Sig. (2-tailed) .001 N 63 | .320 | 0.16 | 0.22 | .359** | -.255** | .530 | .399 | 1 | | | | |
| RP SPPS | Pearson .249 Sig. (2-tailed) .004 N 63 | .304 | .305 | 0.18 | .349** | -0.205 | .411 | 0.17 | .429 | 1 | | | |
| PS SPPS | Pearson 0.15 Sig. (2-tailed) .21 N 63 | .315 | .325 | 0.23 | .334** | -.460** | .534 | - | .452 | .322 | 1 | | |
| TOTAL SPPS | Pearson .264 Sig. (2-tailed) .03 N 63 | .431 | .322 | 0.22 | .417** | -.303* | .765 | .549 | .718 | .749 | .542 | 1 | |
| AGE | Pearson - Sig. (2-tailed) .24 N 63 | 0.05 | - | - | -0.095 | -0.065 | 0.02 | 0.12 | 0.06 | - | 0.02 | 0.07 | 1 |

** . Correlation is significant at the 0.01 level (2-tailed). * . Correlation is significant at the 0.05 level (2-tailed).

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The results show a positive relationship between mindfulness and perception, indicating that higher mindfulness is associated with better perception. A negative relationship is found between locus of control and perception, suggesting that external locus is associated with poorer perception. No significant relationship is observed between mindfulness and locus of control.

Correlation among Mindfulness, Locus of Control, Perception, and Age in Male Athletes (N = 63) is presented in Table 3. Locus of control has significant negative correlation with perception measures, but does not show significant correlation with mindfulness measures. Mindfulness subscales have positive correlations with each other and high correlation with total mindfulness.

Table 4 – Inter-correlation between Mindfulness, Locus of Control and Perception of Female Athletes

| | | MM SMS PA2 | MB SMS PA2 | AM SMS PA2 | AB SMS PA2 | TOTA L SMS PA2 | LOC SCORE S | AD SPP S | MD SPP S | SP SPP S | RP SPP S | PS SPP S | TOTA L SPPS | AG E |
|----------------------|----------|------------------|------------------|------------------|------------------|----------------------|-------------------|----------------|----------------|----------------|----------------|----------------|-------------------|---------|
| MM SMS PA2 | Pearson | 1 | | | | | | | | | | | | |
| | Sig. (2- | | | | | | | | | | | | | |
| | N | 63 | | | | | | | | | | | | |
| MB SMS PA2 | Pearson | .685 | 1 | | | | | | | | | | | |
| | Sig. (2- | 0 | | | | | | | | | | | | |
| | N | 63 | 63 | | | | | | | | | | | |
| AM SMS PA2 | Pearson | .494 | .420 | 1 | | | | | | | | | | |
| | Sig. (2- | 0 | 0.00 | | | | | | | | | | | |
| | N | 63 | 63 | 63 | | | | | | | | | | |
| AB SMS PA2 | Pearson | .440 | .454 | .527 | 1 | | | | | | | | | |
| | Sig. (2- | 0 | 0 | 0 | | | | | | | | | | |
| | N | 63 | 63 | 63 | 63 | | | | | | | | | |
| TOTA L SMS PA2 | Pearson | .879 | .854 | .651 | .643 | 1 | | | | | | | | |
| | Sig. (2- | 0 | 0 | 0 | 0 | | | | | | | | | |
| | N | 63 | 63 | 63 | 63 | 63 | | | | | | | | |
| LOC SCORE S | Pearson | - | - | - | - | -0.247 | 1 | | | | | | | |
| | Sig. (2- | 0.09 | 0.07 | 0.13 | 0.10 | 0.051 | | | | | | | | |
| | N | 63 | 63 | 63 | 63 | 63 | 63 | | | | | | | |
| AD SPPS | Pearson | .394 | .550 | .281 | .259 | .488** | -0.141 | 1 | | | | | | |
| | Sig. (2- | 0.00 | 0 | 0.02 | 0.04 | 0 | 0.27 | | | | | | | |
| | N | 63 | 63 | 63 | 63 | 63 | 63 | 63 | | | | | | |
| MD SPPS | Pearson | .298 | .413 | 0.18 | .251 | .359** | -0.206 | .529 | 1 | | | | | |
| | Sig. (2- | 0.01 | 0.00 | 0.14 | 0.04 | 0.004 | 0.104 | 0 | | | | | | |
| | N | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | | | | | |
| SP SPPS | Pearson | .302 | .311 | - | 0.17 | .323** | -0.192 | .359 | .450 | 1 | | | | |
| | Sig. (2- | 0.01 | 0.01 | 0.87 | 0.18 | 0.01 | 0.132 | 0.00 | 0 | | | | | |
| | N | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | | | | |
| RP SPPS | Pearson | .309 | .296 | .256 | 0.22 | .326** | -.420** | .349 | .350 | .311 | 1 | | | |
| | Sig. (2- | 0.01 | 0.01 | 0.04 | 0.07 | 0.009 | 0.001 | 0.00 | 0.00 | 0.01 | | | | |
| | N | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | | | |
| PS SPPS | Pearson | 0.11 | 0.19 | 0.14 | 0.05 | 0.178 | -.312* | .383 | .428 | .415 | 0.20 | 1 | | |
| | Sig. (2- | 0.37 | 0.13 | 0.24 | 0.66 | 0.162 | 0.013 | 0.00 | 0 | 0.00 | 0.10 | | | |
| | N | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | | |
| TOTA L SPPS | Pearson | .356 | .485 | 0.23 | 0.19 | .434** | -.376** | .703 | .657 | .676 | .704 | .623 | 1 | |
| | Sig. (2- | 0.00 | 0 | 0.05 | 0.13 | 0 | 0.002 | 0 | 0 | 0 | 0 | 0 | | |
| | N | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | |
| AGE | Pearson | 0.12 | 0.16 | 0.09 | 0.14 | 0.193 | -0.107 | 0.03 | 0.08 | 0.14 | 0.21 | - | 0.136 | 1 |
| | Sig. (2- | 0.31 | 0.20 | 0.46 | 0.27 | 0.13 | 0.404 | 0.78 | 0.49 | 0.25 | 0.09 | 0.52 | 0.288 | |
| | N | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 |

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Among female athletes, a strong positive relationship is found between mindfulness and perception. A significant negative relationship is observed between locus of control and perception. These relationships are stronger. While locus of control is negatively correlated with the majority of variables, it has only one significant relationship with total perception ($r = -.312, p = .013$). There are no significant associations between age and any variable. These

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scales also exhibit significant positive correlations with perception dimensions. Likewise, all the scales making up perception are strongly intercorrelated with each other and with total perception ($p < .001$).

Table 5: Regression Analysis Predicting Locus of Control from Total Mindfulness (Male Athletes)

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|---------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 10.969 | 1.502 | | 7.305 | .000 |
| | TOTAL_SMS_PA2 | -.006 | .026 | -.028 | -.217 | .829 |

The results from the regression analysis show that total mindfulness does not predict locus of control in male athletes ($R = .028$, $R^2 = .001$, $F(1,61) = 0.047$, $p = .829$).

Table 6: Regression Analysis Predicting Perception from Total Mindfulness (Male Athletes)

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|---------------|-----------------------------|------------|---------------------------|-------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 142.802 | 15.422 | | 9.260 | .000 |
| | TOTAL_SMS_PA2 | .958 | .268 | .417 | 3.582 | .001 |

The results from the regression analysis shows that the model is statistically significant ($R = .417$, $R^2 = .174$, $F(1,61) = 12.828$, $p = .001$). It is evident that total mindfulness is able to predict perception ($\beta = .417$, $p = .001$), explaining 17.4% variance, which is considered moderate and positive.

Table 7: Regression Analysis Predicting Locus of Control from Total Perception (Male Athletes)

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 18.159 | 2.521 | | 7.204 | .000 |
| | AD_SPPS | -.064 | .078 | -.168 | -.818 | .417 |
| | MD_SPPS | .046 | .047 | .188 | .965 | .339 |
| | SP_SPPS | -.015 | .060 | -.043 | -.244 | .808 |
| | RP_SPPS | .006 | .065 | .021 | .088 | .930 |
| | PS_SPPS | -.201 | .118 | -.297 | -1.710 | .093 |
| | TOTAL_SPPS | -.009 | .040 | -.102 | -.224 | .824 |

The results shows that the regression model is statistically significant ($R = .493$, $R^2 = .243$, $F(6,56) = 3.004$, $p = .013$). However, none of the predictors is statistically significant at $p < .05$.

Table 8: Regression Analysis Predicting Locus of Control from Total Mindfulness (Female Athletes)

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|---------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 13.592 | 1.334 | | 10.187 | .000 |
| | TOTAL_SMS_PA2 | -.047 | .024 | -.247 | -1.989 | .051 |

The results shows that total mindfulness did not significantly predict locus of control among female athletes ($R = .247$, $R^2 = .061$, $F(1,61) = 3.956$, $p = .051$). The results indicate that mindfulness is not a significant predictor of locus of control, suggesting no direct relationship between the two variables.

Table 9: Regression Analysis Predicting Perception from Total Mindfulness (Female Athletes)

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|---------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 152.170 | 12.301 | | 12.371 | .000 |
| | TOTAL_SMS_PA2 | .820 | .218 | .434 | 3.760 | .000 |

The results shows that the regression model is statistically significant ($R = .434$, $R^2 = .188$, $F(1,61) = 14.137$, $p < .001$). The predictor variable total mindfulness is significant ($\beta = .434$, $p < .001$).

Table 10: Regression Analysis Predicting Locus of Control from Total Perception (Female Athletes)

| Model | | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 16.980 | 2.926 | | 5.804 | .000 |
| | AD_SPPS | .052 | .098 | .103 | .530 | .598 |
| | MD_SPPS | -.006 | .083 | -.012 | -.073 | .942 |
| | SP_SPPS | .004 | .064 | .012 | .063 | .950 |
| | RP_SPPS | -.103 | .058 | -.402 | -1.783 | .080 |
| | PS_SPPS | -.117 | .077 | -.271 | -1.530 | .132 |
| | TOTAL_SPPS | .000 | .044 | .003 | .007 | .994 |

The regression model is found to be statistically significant: $R = .488$, $R^2 = .238$, $F(6,56) = 2.916$, $p = .015$. Although the model accounts for 23.8% of the variance, none of the predictors is found to be significant at $p < .05$ level in the final model.

DISCUSSION

This study sought to explore the correlation between mindfulness, locus of control, and perception in a homogenous population of 18 to 25-year-old athletes.

Correlation Analysis of Male athletes

A positive significant correlation is established between mindfulness and perception. It is because mindfulness promotes focus and being present, allowing athletes to observe their performances easily, hence improving perceptions. Bernier et al. (2009) finds that mindfulness is associated with better concentration and emotional regulation in performance situations.

A negative significant correlation is established between locus of control and perception. It is because locus of control impacts confidence; an internal locus promotes confidence, hence improves perceptions, while external locus causes doubt and diminishes perception. A reverse association exists between locus of control and perceptions as individuals who feel they have control over their destinies are likely to be more confident and view themselves favourably because they associate their success and failures to their actions.

Correlation Analysis of Female athletes

A significant positive correlation exists between mindfulness and perception. It is because mindfulness promotes emotion control and helps maintain attention, making it easy for athletes to perceive their performances, leading towards perception. According to Baltzell & Summers (2017), mindfulness can aid athletes' emotion management and attention maintenance.

There is negative significant correlation between locus of control and perception. It is because a internal locus of control leads to stress management and improved performance evaluations, while external locus of control promotes stress. Therefore, internal locus of control helps to push confidence and leads to better perception while external locus of control leads to decrease in perception. Doron & Gaudreau (2014) reported that athletes with internal control have greater stress resilience, and according to Hanton, Neil, & Mellalieu (2008), such athletes handle the pressures of competition more successfully.

Correlation Analysis showing Gender Difference

Perception and mindfulness have a positive significant correlation in both males and females, with it being higher in females, attributed to better emotional regulation. It is because women are greatly emotionally driven, and mindfulness helps improve emotion control, thus making their performance perception more accurate. According to Nicholls et al. (2016), women athletes engage in more emotion-focused coping than men.

There is a negative significant correlation between locus of control and perception, which was higher among females, which reduces perception. It is because locus of control causes increased emotional pressure and stress among females, therefore, external locus of control leads to decreased perception while the athletes who have an internal locus of control have better perception. Holden et al. (2019) states that external locus of control is associated with high levels of stress and poor evaluation of performance.

Regression Analysis of Male Athletes

Mindfulness significantly predicts perception. The predictive power of mindfulness on perception is valid because mindfulness helps athletes pay more attention, which helps them analyse performance information better. This is because mindfulness enhances focus and awareness, allowing athletes to analyze and interpret their performance effectively. De Petrillo et al. (2009) discovers that mindfulness training improves attention and assists athletes in interpreting their performance.

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Locus of Control significantly predicts Perception. This is because locus of control influences how athletes evaluate their performance; internal control leads to confidence and positive perception, while external control leads to doubt and negative perception. According to Julian B. Rotter (1966), individuals with internal locus of control believe outcomes depend on their actions, leading to better evaluation.

Regression Analysis of Female athletes

Mindfulness is found to be significantly predictive of perception; the implication is that emotional control increases performance awareness. Mindfulness is expected to have a predictive effect on perception because of its influence on emotional regulation and attention. This is because mindfulness enhances emotions and attentiveness, resulting in better awareness and perception of performance. According to Aherne et al. (2011), mindfulness training facilitates concentration and performance awareness.

Locus of Control is significantly predictive of Perception. This is because control beliefs affect coping and performance evaluation, which shape perception. Internal control leads to better coping and positive perception, while external control leads to weaker evaluation. Wiese-Bjornstal et al. (1998) found that control beliefs influence psychological responses and performance evaluation.

Regression Analysis showing Gender difference

In both genders, mindfulness significantly predicts perception but higher among females. The implication is that emotional control is likely to influence performance perception. This is because mindfulness is more effective in controlling emotions due to its greater effect on female performance. The reason why mindfulness is a better predictor of perception of performance in women is due to the more significant impact of emotions on their evaluation of performance.

Locus of Control significantly predicts Perception across gender. This is because sense of control directly affects how performance is perceived in both males and females. Internal control improves perception, while external control worsens it. According to Nicholls et al. (2016), athletes with internal control show better coping and more positive performance evaluation.

Hypothesis Testing

There is a significant positive relationship between mindfulness and perception and a significant negative relationship between locus of control and perception. Therefore, the alternative hypothesis is accepted and the null hypothesis is rejected.

CONCLUSION

The results have shown a positive correlation between mindfulness and perception and a negative correlation between locus of control and perception, with it being more pronounced in women. The regression analysis indicates that mindfulness is a predictor of perception while perception, on the other hand, is a predictor of locus of control. Therefore, mindfulness has a positive impact on perception while perception affects locus of control. Future research would be to determine how perception serves as an intervening variable between mindfulness and locus of control through the use of more sophisticated statistical techniques. This study could also be done over a longer time frame.

The study concludes that mindfulness is positively related to perception and significantly predicts it. Locus of control is negatively related to perception, while perception significantly predicts locus of control. Mindfulness and locus of control do not have a direct relationship.

REFERENCES

- Adam, M. E. K., Ferguson, L. J., Mosewich, A. D., & Kowalski, K. C. (2023). *The Sport Performance Perceptions Scale (SPPS) manual*. College of Kinesiology, University of Saskatchewan.
- Allen, M. S., Greenlees, I., & Jones, M. (2013). Personality in sport: A comprehensive review. *International Review of Sport and Exercise Psychology*, 6(1), 184–208. <https://doi.org/10.1080/1750984X.2013.769614>
- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological well-being. *Journal of Personality and Social Psychology*, 84(4), 822–848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Dhillon, S., & Kaur, M. (2025). *Study of locus of control among adolescents in relation to their gender and locale*. *Social Science Journal for Advanced Research*, 5(6), 33–39. <https://zenodo.org/records/18107554>
- Kumar, A., & Srivastava, S. N. (1985). *Manual for Hindi version of Rotter's locus of control scale*. Kumar Publications.
- Oguntuase, S. B., & Sun, Y. (2022). Effects of mindfulness training on resilience, self-confidence and emotion regulation: Mediating role of locus of control. *Frontiers in Psychology*, 13, 890123. <https://doi.org/10.3389/fpsyg.2022.890123>
- Rogowska, A. M., & Tataruch, R. (2024). Mindfulness and athletes' mental skills: Mediating role of regulation. *International Journal of Environmental Research and Public Health*, 21(2), 1156. <https://doi.org/10.3390/ijerph21021156>
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1), 1–28. <https://doi.org/10.1037/h0092976>
- Skinner, E. A. (1996). A guide to constructs of control. *Journal of Personality and Social Psychology*, 71(3), 549–570. <https://doi.org/10.3389/fpsyg.2025.1330021>
- Ullrich-French, S., Cox, A. E., & Huong, N. (2022). Expanding the State Mindfulness Scale for Physical Activity (SMS-PA2): Development and validation. *Measurement in Physical Education and Exercise Science*, 26(1), 39–51. <https://doi.org/10.1080/1091367X.2021.2015843>
- Wiese-Bjornstal, D. M., Smith, A. M., Shaffer, S. M., & Morrey, M. A. (1998). An integrated model of response to sport injury: Psychological and sociological dynamics. *Journal of Applied Sport Psychology*, 10(1), 46–69. <https://doi.org/10.1080/10413209808406377>

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Conflict of Interest

The author(s) declared no conflict of interest.

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