

A STUDY OF MENTAL HEALTH IN NATIONAL, STATE AND DISTRICT LEVEL MALE KHO-KHO PLAYERS

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The purpose of this study was to compare Mental Health among National Level, State Level and District Level Male Kho-Kho Players. For the purpose of this investigation Seventy (N=70), Male subjects between the age group of 16-28 years (Mean \pm SD: Age 21.571 \pm 2.821 (yrs), Body Height 168.9 \pm 5.525 (cm), Body Mass 65.16 \pm 4.089 (kg)) volunteered to participate in the study. The investigator has used the Mental Health Battery (MHB) constructed by (Singh and Gupta, 2000) for measuring all the dimensions of mental health of the subjects and their overall mental health. The Statistical Package for the Social Sciences (SPSS) was used for all analyses. The differences in the mean of each group for selected variable were tested for the significance of difference by One-way Analysis of Variance (ANOVA). For testing the hypotheses, the level of significance was set at 0.05. To conclude, it is significant to mention in relation to Emotional Stability, Overall Adjustment, Autonomy, Intelligence and Mental Health that results of Analysis of Variance (ANOVA) among Male Kho-Kho Players (N=70) (i.e., National Level (N1=15), State Level (N2=25) and District Level (N3=30)) were found statistically insignificant ($P > .05$). Furthermore, in relation to Security-Insecurity and Self-Concept that result of Analysis of Variance (ANOVA) among Male Kho-Kho Players (i.e., National Level, State Level and District Level) was found statistically significant ($P < .05$).

Keywords: Mental health, emotional stability, overall adjustment, autonomy, security-insecurity, self-concept, intelligence

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01. INTRODUCTION

According to the World Health Organization (WHO), mental health is “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community” (World Health Organization, 2004) [1]. In their line of work, athletes have a special set of challenges, from accomplishing goals and winning trophies to dealing with media scrutiny and living up to the high expectations of passionate fans. Athletes are viewed as a particular demographic with unique requirements for both their physical and mental well-being (Etzel & Watson, 2007) [2]. Significant time limits, pressure to stay physically fit, social isolation, trouble navigating complex multiple relationships, exhaustion, financial worries, negative feedback from others, and injury have all been reported to be present (Parham, 1993) [3].

Physical exercise has been shown to improve mental health and overall wellbeing and can be a key component in treating a variety of mental health conditions. This does not imply, nevertheless, that athletes are exempt from mental disease. In fact, athletes who compete at higher levels endure certain stresses that could raise their risk of mental health issues. It is a known truth that athletes experience high levels of stress and pressure due to constant competition, which puts some at risk for developing depressive or anxious symptoms.

Despite the stressors athletes face, there is a paucity of research on the mental health of elite athletes (Reardon and Factor, 2010; Hughes and Leavey, 2012) [4, 5]. A study of elite athletes in Australia reported almost half were experiencing symptoms of a mental health problem, and the proportion meeting caseness cutoffs for mental illness were deemed comparable to community data (Gulliver *et al.*, 2015) [6]. More broadly, (Rice *et al.*, 2016) [7] conducted a systematic narrative review and also suggested the prevalence of mental illness in elite athletes was comparable to the general population.

The authors issued a warning, noting that there aren't many high-quality systematic and intervention studies that follow sound methodology or are well-reported in this field. Elite athletes face a number of obstacles when trying to get care for mental health issues.

[8]

Competitive athletes may have less positive attitudes toward help-seeking for mental health problems than non-athletes (Watson, 2005) , perhaps partially due to being perceived as a weakness (Bauman, 2016) [9]. This perceived stigma among elite athletes is a primary barrier, followed by a lack of awareness of mental health problems, and negative past experiences of seeking help (Gulliver *et al.*, 2012a) [10]. Additionally, if athletes do not feel that the cultures of sporting organisations are supportive of these issues, access to timely and appropriate care is likely to be restricted. Some sporting organisations may not recognise the prevalence and significance of mental health problems in elite athlete populations.

02. MATERIAL AND METHODS

2.1 Selection of Subjects

For the purpose of the present study Seventy (N=70), Male subjects between the age group of 16-28 years (Mean ± SD: Age 21.571 ± 2.821 (yrs), Body Height 168.9 ± 5.525 (cm), Body Mass 65.16 ± 4.089 (kg)) volunteered to participate in the study. The demographics of subjects are brought forth in Table-1.

Table-1: Subject’s Demographics (N=70) of Male Kho-Kho Players (i.e., National Level (N1=15), State Level (N2=25) and District Level (N3=30)).

Variable (s)	Sample Size (N=70)			
	Total (N=70)	National Level (N1=15)	State Level (N2=25)	District Level (N3=30)
Age (yrs)	21.571 ± 2.821	21.93±3.972	21.40±2.380	21.53±2.556
Body Height (cm)	168.9 ± 5.525	169.0±5.00	168.92±5.163	168.9±6.20
Body Mass (kg)	65.16±4.089	63.09±4.90	65.24±3.21	66.13±4.04

N; sample size, yrs; years, cm; centimeters, kg; kilograms.

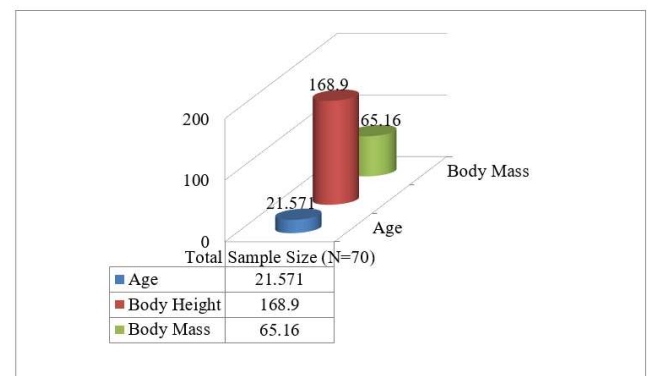


Figure-1: Subject’s Demographics (N=70) of Male Kho-Kho Players (i.e., National Level (N1=15)

, State Level (N₂=25) and District Level (N₃=30)).

03. SELECTION OF TOOLS

Mental health battery (MHB)

The investigator has used the Mental Health Battery (MHB) constructed by Singh and Gupta (2000) for measuring all the dimensions of mental health of the subjects and their overall mental health. The six areas of mental health covered by this battery are:



Figure-2: The six areas of mental health

The battery consisted of 130 items covering all the areas of mental health. Validity coefficient for various items was found to be significant at .01 levels. Both temporal stability reliability and internal consistency reliability of the questionnaire were computed.

04. STATISTICAL ANALYSIS

The Statistical Package for the Social Sciences (SPSS) was used for all analyses. The differences in the mean of each group for selected variable were tested for the significance of difference by One-way Analysis of Variance (ANOVA). For testing the hypotheses, the level of significance was set at 0.05.

05. RESULTS

For each of the chosen variable, the result pertaining to Analysis of variance (ANOVA) among National Level, State Level and District Level Male Kho-Kho Players on the variable Mental Health. (i.e., Emotional Stability, Overall Adjustment, Autonomy, Security- Insecurity, Self-Concept and Intelligence) are presented in the following tables:

Table 2:Analysis of variance (ANOVA) results among Male Kho-Kho Players (N=70) (i.e.,

National Level (N₁=15), State Level (N₂=25) and District Level (N₃=30) with regards to Emotional Stability.

Source of Variation	Sum of Squares	d.f.	Mean Square	F-value	p-value
Between Groups	10.579	2	5.290	1.378	.259
Within Groups	257.207	67	3.839		
Total	267.786	69			

The p-value is .259. The result is not significant at p > .05.

Table-3:Analysis of variance (ANOVA) results among Male Kho-Kho Players (N=70) (i.e., National Level (N₁=15), State Level (N₂=25) and District Level (N₃=30) with regards to Overall Adjustment.

Source of Variation	Sum of Squares	d.f.	Mean Square	F-value	p-value
Between Groups	2.412	2	1.206	.130	.878
Within Groups	620.673	67	9.264		
Total	623.086	69			

The p-value is .878. The result is not significant at p > .05.

Table-4: Analysis of variance (ANOVA) results among Male Kho-Kho Players (N=70) (i.e., National Level (N₁=15), State Level (N₂=25) and District Level (N₃=30) with regards to Autonomy.

Source of Variation	Sum of Squares	d.f.	Mean Square	F-value	p-value
Between Groups	10.046	2	5.023	1.303	.278
Within Groups	258.240	67	3.854		
Total	268.286	69			

The p-value is .278. The result is not significant at p > .05.

- It is evident from **Table-2** that results of Analysis of Variance (ANOVA) among Male Kho-Kho Players with regards to **Emotional Stability** were found statistically insignificant (P > .05).
- It is evident from **Table-3** that results of Analysis of Variance (ANOVA) among Male Kho-Kho Players with regards to **Overall Adjustment** were found statistically insignificant (P > .05).
- It is evident from **Table-4** that results of Analysis of Variance (ANOVA) among Male Kho-Kho Players with regards to **Autonomy** were found statistically insignificant (P > .05).

Table-5: Analysis of variance (ANOVA) results among Male Kho-Kho

Players (N=70) (i.e., National Level (N1=15), State Level (N2=25) and District Level (N3=30) with regards to Security-Insecurity.

Source of Variation	Sum of Squares	d.f.	Mean Square	F-value	p-value
Between Groups	26.331	2	13.166	3.536	.035
Within Groups	249.440	67	3.723		
Total	275.771	69			

The p-value is .035. The result is significant at $p < .05$.

- It is evident from **Table-5** that results of Analysis of Variance (ANOVA) among Male Kho-Kho Players (N=70) (i.e., National Level (N1=15), State Level (N2=25) and District Level (N3=30)) with regards to **Security-Insecurity** were found statistically significant ($P < .05$). Since the obtained F-value was found significant, therefore, post-hoc test was employed to study the direction and significance of differences between paired means. The results of post-hoc test have been presented in **Table-6**.

Table-6: Analysis of post-hoc test among Male Kho-Kho Players (N=70) (i.e., National Level (N1=15), State Level (N2=25) and District Level (N3=30) with regards to Security-Insecurity.

Multiple Comparisons			
Group (A)	Group (B)	Mean Difference	Sig.
National (11.2000)	State	1.28000	.135
	District	1.60000*	.038
State (9.9200)	National	-1.28000	.135
	District	.32000	.829
District (9.6000)	National	-1.60000*	.038
	State	-.32000	.829

- A glance at **Table-6** showed that the mean value of **National** group was 2000 whereas **State** had mean value as 9.9200 and the mean difference between both the groups was found 1.28000. This shows that the **National** group had demonstrated significantly better on **Security-Insecurity** than their counterpart's 9.9200group.
- The mean value of **National**

- group was 2000 whereas **District** had mean value as 9.6000 and the mean difference between both the groups was found 1.60000. This shows that the **National** group had demonstrated significantly better on **Security-Insecurity** than their counterpart's 9.6000 groups.
- The mean value of **State** group was 9200 whereas **District** had mean value as 9.6000 and the mean difference between both the groups was found .32000. This shows that the **State** group had demonstrated significantly better on **Security-Insecurity** than their counterpart's 9.6000 group.

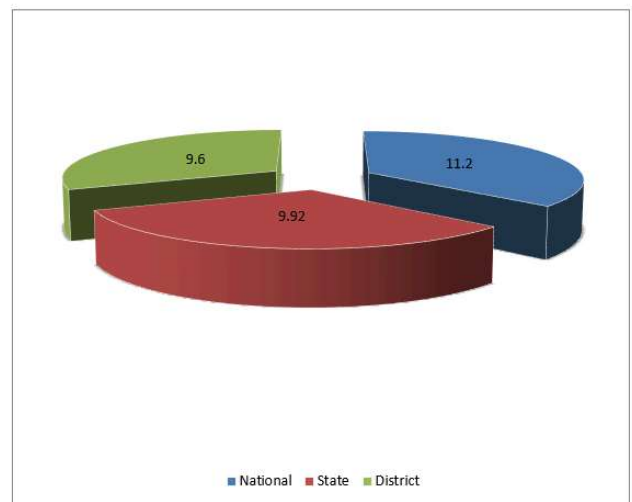


Figure-3: Graphical representation of mean scores Male Kho-Kho Players (N=70) ((i.e., National Level (N1=15), State Level (N2=25) and District Level (N3=30) with regards to Security-Insecurity.

Table-7: Analysis of variance (ANOVA) results among Male Kho-Kho Players (N=70) (i.e., National Level (N1=15), State Level (N2=25) and District Level (N3=30) with regards to Self-Concept.

Source of Variation	Sum of Squares	d.f.	Mean Square	F-value	p-value
Between Groups	35.352	2	17.676	5.510	.006
Within Groups	214.933	67	3.208		
Total	250.286	69			

The p-value is .006. The result is significant at $p < .05$

- It is evident from **Table-7** that results of Analysis of Variance (ANOVA) among **Kho-Kho Players (N=70) (i.e., National Level (N1=15), State Level (N2**

- =25) and District Level (N3=30) with regards to Self-Concept were found statistically significant ($P < .05$). Since the obtained F-value was found significant, therefore, post-hoc test was employed to study the direction and significance of differences between paired means. The results of post-hoc test have been presented in **Table-8**.

Table-8: Analysis of post-hoc test among Male Kho-Kho Players (N=70) (i.e., National Level (N1=15), State Level (N2=25) and District Level (N3=30) with regards to Self-Concept.

Multiple Comparisons			
Group (A)	Group (B)	Mean Difference	Sig.
National (9.8667)	State	1.06667	.197
	District	-.53333	.644
State (8.8000)	National	-1.06667	.197
	District	-1.60000*	.006
District (10.4000)	National	.53333	.644
	State	1.60000*	.006

- A glance at **Table-8** showed that the mean value of **National** group was 8667 whereas **State** had mean value as 8.8000 and the mean difference between both the groups was found 1.06667. This shows that the **National** group had demonstrated significantly better on **Self-Concept** than their counterpart's 1.06667 group.
- The mean value of **National** group was 8667 whereas **District** had mean value as 10.4000 and the mean difference between both the groups was found -.53333. This shows that the **District** group had demonstrated significantly better on **Self-Concept** than their counterpart's 9.8667 groups.
- The mean value of **State** group was 8.8000 whereas **District** had mean value as 10.4000 and the mean difference between both the groups was found -1.60000. This shows that the **District** group had demonstrated significantly better on **Self-Concept** than their counterpart's 8.8000 group.

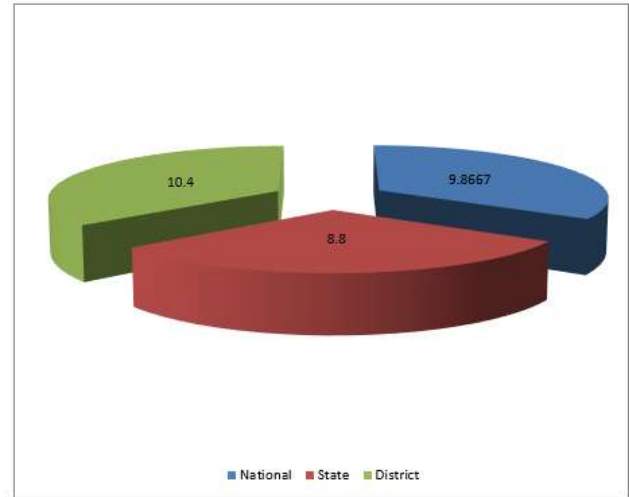


Figure-4: Graphical representation of mean scores Male Kho-Kho Players (N=70) (i.e., National Level (N1=15), State Level (N2=25) and District Level (N3=30) with regards to Self-Concept.

Table-9: Analysis of variance (ANOVA) results among Male Kho-Kho Players (N=70) (i.e., National Level (N1=15), State Level (N2=25) and District Level (N3=30) with regards to Intelligence.

Source of Variation	Sum of Squares	d.f.	Mean Square	F-value	p-value
Between Groups	16.076	2	8.038	.597	.553
Within Groups	901.867	67	13.461		
Total	917.943	69			

The p-value is .553. The result is not significant at $p > .05$.

- It is evident from **Table-9** that results of Analysis of Variance (ANOVA) among Male Kho-Kho Players with regards to **Intelligence** were found statistically insignificant ($P > .05$).

Table-10: Analysis of variance (ANOVA) results among Male Kho-Kho Players (N=70) (i.e., National Level (N1=15), State Level (N2=25) and District Level (N3=30) with regards to Mental Health.

Source of Variation	Sum of Squares	d.f.	Mean Square	F-value	p-value
Between Groups	80.803	2	40.401	1.743	.183
Within Groups	1553.040	67	23.180		
Total	1633.843	69			

The p-value is .183. The result is not significant at $p > .05$.

- It is evident from **Table-10** that results of Analysis of Variance (ANOVA) among

- Male Kho-Kho Players with regards to **Mental Health** were found statistically insignificant ($P > .05$).

06. HYPOTHESIS TESTING

It was hypothesized that there will be significant differences among Male Kho-Kho Players on the variable Mental Health (i.e., Emotional Stability, Overall Adjustment, Autonomy, Intelligence, Security-Insecurity and Self-Concept).

At this point in the research study, the researcher rejected the hypothesis of this study.

07. CONCLUSIONS

To conclude, it is significant to mention in relation to Emotional Stability, Overall Adjustment, Autonomy, Intelligence and Mental Health that results of Analysis of Variance (ANOVA) among Male Kho-Kho Players ($N=70$) (i.e., National Level ($N_1=15$), State Level ($N_2=25$) and District Level ($N_3=30$)) were found statistically insignificant ($P > .05$).

Furthermore, in relation to Security-Insecurity and Self-Concept that result of Analysis of Variance (ANOVA) among Male Kho-Kho Players (i.e., National Level, State Level and District Level) was found statistically significant ($P < .05$).

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