



Differences in Self-Awareness According to Academic Achievement Among First-Division Football Players in the Western Region of Iraq

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ABSTRACT

The present study aimed to identify differences in self-awareness among football players according to the variable of academic achievement in first-division clubs of the Western Region. The researcher employed the descriptive method using correlational relationships, appropriate to the nature of the problem. The research population comprised 90 players distributed across four clubs for the 2021-2022 season, selected purposively from three Iraqi governorates: Diyala, Anbar, and Salah ad-Din. The primary sample consisted of 60 players after excluding Al-Ilm Sports Club following its withdrawal from the league, the pilot study sample ($n = 6$), and the psychometric calibration sample ($n = 6$). The Self-Awareness Scale developed by Daoud and Al-Wattar (2020), comprising 32 items distributed across three domains (Emotional Awareness, Self-Confidence, and Accurate Self-Evaluation), was used as the primary instrument. Statistical analysis revealed significant differences in self-awareness according to academic achievement ($F = 26.776$; $\text{sig} = 0.000$). Post-hoc LSD comparisons confirmed that players with higher academic levels significantly outperformed those with lower levels across all paired comparisons. The study concludes that academic achievement serves as a meaningful predictor of self-awareness in football players and recommends integrating academic and psychological development components within training programmes.

Introduction

Self-awareness is regarded as one of the foundational constructs in psychology, referring to the individual's capacity to perceive their thoughts, feelings, and behaviours in a conscious and organised manner. This awareness contributes to understanding personal strengths and weaknesses, thereby facilitating improved performance and more precise decision-making. Self-awareness is further considered the cornerstone of a balanced personality and a key driver of emotional intelligence. Through its development, individuals are better equipped to achieve psychological and social adaptation more effectively (Bakhsh & Kaki, 2016).

Bakhsh and Kaki (2016) have argued that self-awareness 'is one of the components of personal intelligence, relying on pivotal processes that enable the individual to accurately understand their emotions and identify behaviours that may impede their development and progress. It represents the key to success in professional and athletic life through its role in predicting and contributing to future achievements. Once this awareness is formed within an individual, it leads them to first understand themselves, then work toward achieving goals with a high degree of completeness' (p. 71-73).

Within the athletic context, football players must engage in diverse life activities and practices upon which they can draw, maximising the application of such practices both within training and beyond - to develop cognitive and psychological dimensions that may generate positive performance outcomes during competitive pressures across diverse match situations.

The significance of the present research derives from its focus on academic achievement as an indicator of the player's cognitive and organisational capacities, thereby facilitating the identification of the relationship between academic attainment and level of self-awareness. This in turn enables coaches and educators to adopt integrated training and pedagogical approaches that account for the psychological and cognitive dimensions alongside physical and technical preparation.

The study aimed to identify differences in self-awareness according to the variable of academic achievement among players of first-division clubs in the Western Region of Iraqi football.

There are statistically significant differences in self-awareness scores according to the variable of academic achievement among players of first-division clubs in the Western Region of Iraqi football.

performance at 24 hours, compared to the isocaloric CHO condition.

Materials and Methods

Study Design

The researcher employed the descriptive method using a correlational relational approach, deemed appropriate to the nature of the research problem. This approach enables systematic description and analysis of relationships between variables without experimental manipulation, which is consistent with the cross-sectional, survey-based nature of the present investigation

Population and Sample

The research population comprised all players registered with first-division clubs of the Western Region for the 2021-2022 competitive season, totalling 90 players distributed across four clubs selected purposively from three Iraqi governorates: Diyala, Anbar, and Salah ad-Din. The primary sample consisted of 60 players following the exclusion of Al-Ilm Sports Club due to its withdrawal from the first-division league, the pilot study subsample ($n = 6$), and the psychometric calibration subsample ($n = 6$). Table 1 presents the homogeneity characteristics of the sample.

Sample Homogeneity

To ensure the homogeneity of the study sample, the researcher assessed key descriptive variables - including height, body mass, chronological age, and training age - using the skewness coefficient as an indicator of distributional normality. Results confirmed acceptable homogeneity across all variables, as all skewness values fell within the acceptable range of ± 1 , as presented in Table 1.

Table 1. Homogeneity of the study sample across anthropometric and experiential variables (Mean $\pm$ SD).

No.	Variable	Unit	Mean	SD	Skewness
1	Height	cm	175.5	7.448	0.186
2	Body Mass	kg	67.968	5.653	0.409
3	Chronological Age	years	24.533	3.538	-0.321
4	Training Age	years	8.516	3.402	-0.055

Note. SD = Standard Deviation. All skewness coefficients fall within the range of +1 to -1, confirming acceptable distributional homogeneity of the sample across all measured variables.

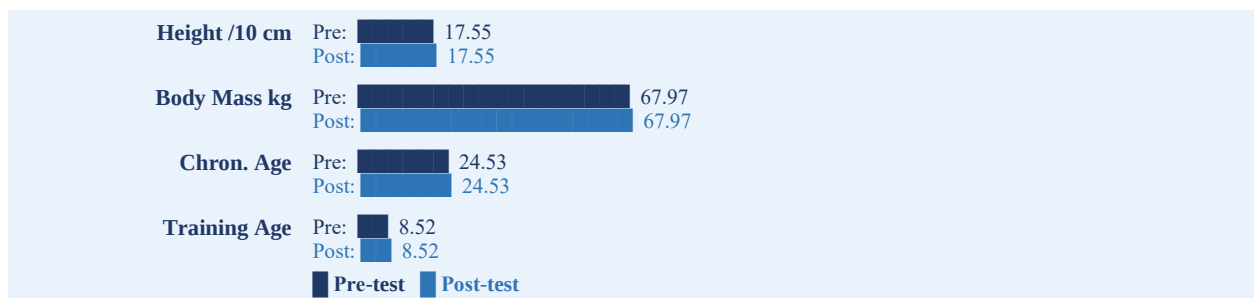


Figure 1. Mean values of homogeneity variables for the study sample

Research Instrument: Self-Awareness Scale

The researcher adopted the Self-Awareness Scale developed by Daoud and Al-Wattar (2020), comprising 32 items distributed across three domains: (1) Emotional Awareness (9 items); (2) Self-Confidence (12 items); and (3) Accurate Self-Evaluation (11 items). The scale utilised a five-point Likert response format (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree) with weights ranging from 5 to 1. The theoretical maximum score on the scale is 160 points, and the minimum is 32 points. All scale items were positively worded and contained no reverse-scored items.

The scale was administered to the main sample under standardised conditions, with each club's session conducted at their designated training facility in the presence of players, coaching staff, and the research assistance team. Players completed the scale individually in its final standardised format to ensure response authenticity and minimise social desirability bias

Statistical Analysis

The following statistical procedures were employed in data analysis: percentage frequencies; arithmetic mean; standard deviation; simple correlation coefficient; one-way analysis of variance (ANOVA, F-test); and Least Significant Difference (LSD) post-hoc test for pairwise comparisons between academic level groups. All analyses were performed using IBM SPSS Statistics (Version 26.0), with the significance level set at $\alpha = 0.05$.

Results

Descriptive Statistics by Academic Level

Table 2 presents the descriptive statistical parameters of the Self-Awareness Scale scores stratified by academic achievement level. A clear ascending gradient in mean self-awareness scores is observed as academic level increases, from 99.15 (primary or below) to 141.84 (bachelor's degree or above), suggesting a systematic positive relationship between academic attainment and self-awareness.

Table 2. Descriptive statistical parameters of the Self-Awareness Scale according to academic achievement level.

No.	Academic Level	n	%	Mean	SD	Max	Min	Median
1	Primary or below	13	21.3%	99.15	24.23	137	67	98
2	Intermediate	18	29.5%	120.11	9.77	132	96	123
3	Secondary	10	16.4%	131.00	7.01	146	119	131.5
4	Bachelor's or above	19	31.1%	141.84	8.85	160	130	141

Note. *n* = sample size per group; % = percentage of total sample; SD = standard deviation. The ascending gradient from primary level (*M* = 99.15) to bachelor's level (*M* = 141.84) indicates a systematic relationship between academic achievement and self-awareness scores.

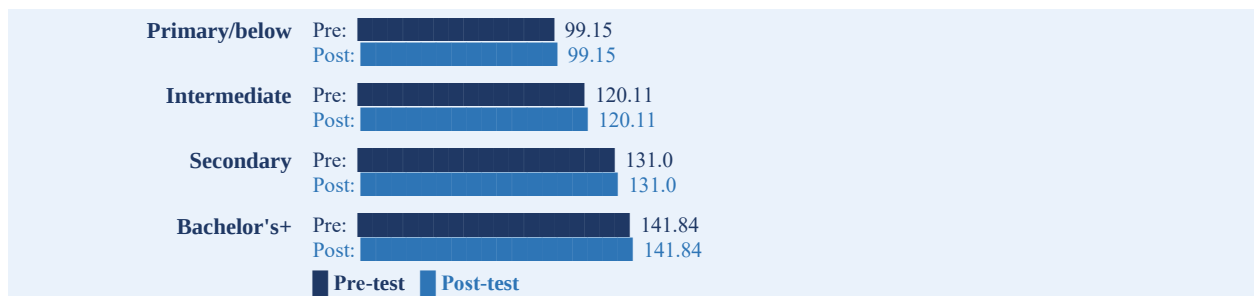


Figure 2. Mean Self-Awareness Scale scores across the four academic achievement levels. The progressive increase confirms the ascending pattern observed in the descriptive statistics

One-Way Analysis of Variance

To test the significance of observed between-group differences in self-awareness according to academic level, a one-way ANOVA was conducted. As presented in Table 3, the ANOVA yielded a highly significant F-value ($F = 26.776$; $\text{sig} = 0.000$), confirming the rejection of the null hypothesis and the acceptance of the research hypothesis that significant differences exist in self-awareness scores according to academic achievement level.

Table 3. One-way ANOVA results for differences in self-awareness according to academic achievement level.

Variable	Source of Variance	SS	df	MS	F	Sig	Decision
Self-Awareness by Academic Level	Between Groups	14831.737	3	4943.912	26.776	0.000	Significant
	Within Groups	10339.996	56	184.643			

Note. * Significant at the 0.05 level ($\text{sig} < 0.05$). SS = Sum of Squares; df = degrees of freedom; MS = Mean Squares; F = F-ratio. The between-groups sum of squares (14,831.737) substantially exceeds the within-groups sum (10,339.996), confirming that academic level explains a meaningful proportion of variance in self-awareness scores.

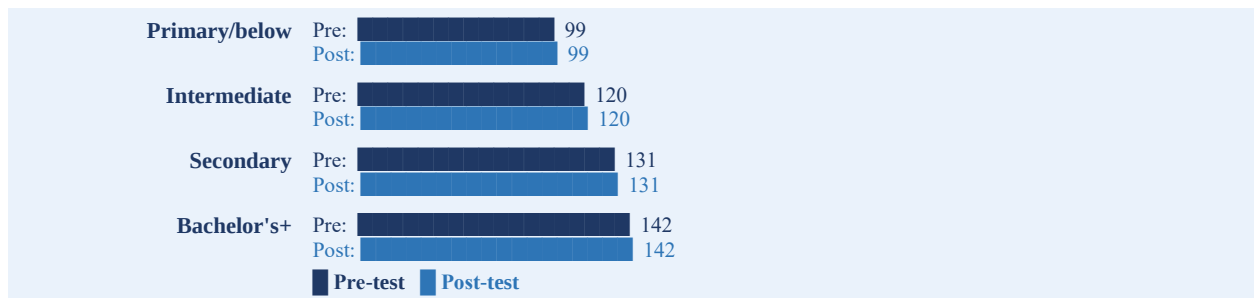


Figure 3. Mean Self-Awareness scores by academic level (ANOVA comparison). The between-groups variance is substantially larger than the within-groups variance, confirming a significant group effect ($F = 26.776$; $p < 0.001$).

Post-Hoc LSD Comparisons

Following the significant ANOVA result, LSD post-hoc comparisons were conducted to identify the specific pairs of academic levels that differed significantly. Table 4 presents the pairwise mean differences and associated significance values. Results indicate that all pairwise comparisons between academic levels were statistically significant ($p < 0.05$), with higher academic levels consistently producing superior self-awareness scores.

Table 4. LSD post-hoc pairwise comparison results for self-awareness differences according to academic level.

Academic Level	Primary/below	Intermediate	Secondary	Bachelor's+
Primary/below	—	-20.957* (.000)	-31.846* (.000)	-42.688* (.000)
Intermediate	—	—	-10.888* (.047)	-21.730* (.000)
Secondary	—	—	—	-10.842* (.046)
Bachelor's+	—	—	—	—

Note. * Significant at the 0.05 level. Values represent mean differences (higher academic level minus lower level). All negative values indicate that the higher academic group scored significantly above the lower group. (—) indicates no comparison conducted for that cell.

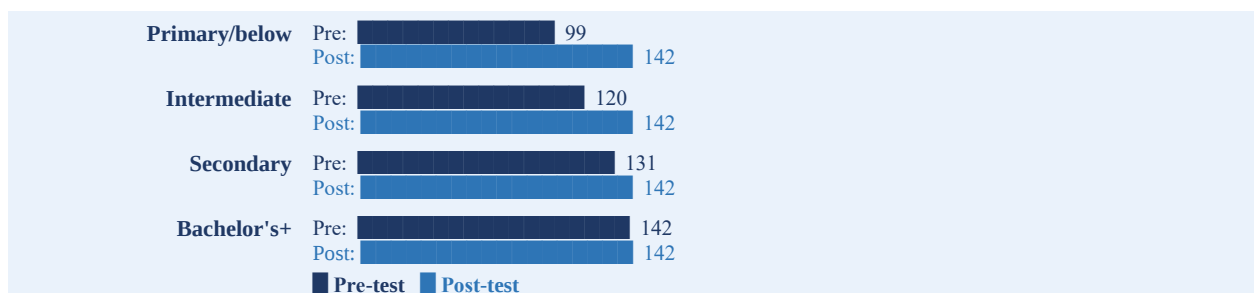


Figure 4. Visual comparison of self-awareness means for each academic group against the Bachelor's or above group mean (reference line). The progressive and significant gap confirms the superiority of higher academic attainment groups.

Discussion

Interpretation of Principal Findings

The results presented in Tables 2, 3, and 4 consistently demonstrate the presence of statistically significant differences in self-awareness according to academic achievement level ($F = 26.776$; $\text{sig} = 0.000$), with higher academic levels associated with progressively superior self-awareness scores. The researchers attribute these findings to the substantive role that academic and intellectual engagement plays in supporting players' cognitive and psychological capacities.

Integration within educational institutions and exposure to academic communities develops players' capabilities and leaves a positive imprint on their professional trajectory. It is well established that educational curricula across all stages - from primary education through advanced degrees - exert formative pedagogical and behavioural influences. Differences between educated and less-educated individuals manifest clearly through social interaction and cultural engagement, and the cultural level can be identified across multiple dimensions: through the rational thinking carried by the educated person, intellectual openness, and repeated successes that collectively enhance the individual's sense of self-worth, competence, and ultimately self-awareness.

These findings are consistent with the conclusion of Malhi and Rzers (2005) that 'success in education is more influential in self-esteem and self-awareness.' The researchers further propose that the cultural level as reflected in academic achievement was a determining factor in producing these differences. At the university level, for example, most students demonstrate capacity for mindfulness, concentration, and momentary awareness of the diversity and complexity of information they encounter, which in turn reflects positively on their cognitive processing.

This aligns with the finding of Hiawi and Abd (2018) that 'university students generally direct attention directly to new and unusual stimuli,' an attentional orientation that likely contributes to the heightened self-awareness documented in the higher academic groups of the present study. Conversely, the benefits provided by educational institutions will be denied to those who have not had access to education or who are at lower educational stages.

Contextual Factors and Explanatory Mechanisms

Accumulated experience resulting from cultural and academic contact provides educated players with the capability for flexible engagement with novel situations, drawing on prior knowledge and awareness of multiple perspectives. As Al-Badri (2022) noted, citing Younis: 'When the individual reaches a state of awareness of thoughts, they begin to distinguish each thought individually, then become capable of absorbing all these thoughts in an open-minded way. This process ultimately leads to the construction of more logical thinking, and these information-processing capacities enable individuals to apply information in new ways and within alternative contexts' (p. 32).

The significant differences in self-awareness according to academic achievement therefore favour the groups of players with higher educational attainment, as consistently demonstrated across all pairwise comparisons. These findings, however, are not consistent with those of Al-Najjar (2018), whose study reported 'no statistically significant differences in self-awareness domains according to the variable of academic qualification between male and female teachers' (p. 20). The researchers attribute this discrepancy to the fundamental difference in sample characteristics: the present study involved athletic players who combine physical, psychological, and academic demands simultaneously, whereas Al-Najjar's sample comprised teachers with a relatively homogeneous academic profile, potentially attenuating between-group variance.

Theoretical Implications

From a theoretical standpoint, the present findings provide empirical support for the proposition that formal education functions as a significant ecological resource for the development of self-awareness in

athletes. The consistent, dose-response-like relationship between academic level and self-awareness scores - with each successive educational stage associated with meaningfully higher mean scores (mean differences ranging from 10.842 to 42.688 points across comparison pairs) - suggests that the relationship is not merely categorical but reflects a progressive developmental trajectory in which each additional educational stage contributes incrementally to the cognitive and metacognitive capacities that underpin self-awareness.

This interpretation is consistent with cognitive developmental models that posit formal education as a driver of metacognitive sophistication - specifically, the capacity for reflective monitoring of one's own mental states - which represents the cognitive foundation of self-awareness. Football players who engage in higher educational levels may therefore develop not only domain-specific technical knowledge but also the broader metacognitive resources that allow them to monitor and regulate their emotional responses, accurately appraise their performance capabilities, and engage in the constructive self-evaluation that underpins competitive self-awareness

Conclusions

Based on the findings of this investigation, the following conclusions are drawn: First, academic achievement demonstrated a significant role in producing variance in self-awareness scores among football players, with higher academic groups consistently outperforming lower academic groups across all pairwise comparisons. Second, statistically significant differences were confirmed between all four academic levels - primary or below, intermediate, secondary, and bachelor's or above - favouring the higher level in each pairwise comparison (all $p < 0.05$). Third, academic attainment represents a meaningful ecological contributor to the psychological and cognitive capabilities of sports players, specifically within the three domains of self-awareness: Emotional Awareness, Self-Confidence, and Accurate Self-Evaluation.

In light of the study conclusions, the researchers offer the following recommendations: First, coaches and player development professionals should attend to the educational and academic dimension as a complementary resource to physical and technical preparation. Second, psychological training programmes should incorporate dedicated components for developing self-awareness, particularly for players with lower educational levels. Third, future research should examine the relationship between self-awareness and other variables including playing position, training experience, and composite technical performance. Fourth, the Self-Awareness Scale of Daoud and Al-Wattar (2020) should be applied within early talent identification programmes to assess the psychological capacities of young developing players

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Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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