ASSESSMENT OF SELF-PERCEPTION AND SELF-ATTITUDES IN WOMEN'S RUGBY SEVENS ATHLETES

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ABSTRACT. The purpose of the present study is to analyze the levels of self-perception among Romanian female Rugby Sevens players, both juniors and seniors, by identifying potential differences according to their performance level. We hypothesize that female Rugby Sevens players generally exhibit high levels of self-perception. Furthermore, we assume that differences in self-perception exist between club players and those competing for the national team. The study included 97 female Rugby Sevens players participating in the 2024 edition of the Romanian National Championship: 29 senior players with a mean age of 21.1 ± 4.8 years and 68 junior players with a mean age of 15.2 ± 1.5 years. Self-perception was assessed using the PAS Questionnaire: Perceptions and Self-Attitudes. Statistical analyses were performed with IBM SPSS Statistics 20, applying the Shapiro–Wilk test, Kolmogorov–Smirnov test, Frequencies, Independent-Samples T Test, and the nonparametric Mann–Whitney U test. The results indicate generally high levels of self-perception among female Rugby Sevens players, although medium and low values were observed on certain scales. Additionally, statistically significant differences were found between club players and national team players, both at junior and senior levels.

Keywords: Rugby sevens; female athletes; self-perception; self-attitudes; performance

INTRODUCTION

Sevens rugby is a dynamic and demanding sport that requires not only exceptional physical abilities but also specific psychological traits (McAuliffe, 2021; Kerr, 2019; Dohme et al., 2017). Confidence represents a fundamental factor in

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sports performance, strongly influencing athletes' commitment and ability to cope with competitive challenges. At both junior and senior levels, this psychological dimension contributes to individual progress, team cohesion, and competitive outcomes (Castro-Sánchez et al., 2019; King et al., 2019; Fernández-García et al., 2015).

Several authors argue that success in elite sport is closely linked to psychological preparation, with mental skills playing a crucial role in achieving and sustaining peak performance (Van Rooyen, 2015; MacNamara et al., 2010). Career development is strongly influenced by attributes such as commitment, perseverance, determination, competitiveness, and self-confidence (Hendricks, 2012; MacNamara et al., 2010; Kruyt & Grobbelaar, 2019; Sanader et al., 2019; Sanader et al, 2021). Confidence in particular underpins motivation and the ability to face competitive demands (Mellalieu, 2017; Collins et al., 2019; Piepiora et al., 2020; Alexe & Sandovici, 2018).

In team sports, athletes must balance individual and collective goals, navigating the complexity between personal and social identities (Campo, 2019). Optimism and positive thinking are essential for overcoming setbacks and maintaining the motivation and energy required for performance. Belief in one's abilities further enables athletes to meet challenges, exceed limits, and sustain the conviction of achieving excellence (Nicolescu, 2021; Nicolescu & Glavan, 2022; Gledhill & Harwood, 2015; Mellalieu, 2017; Collins et al., 2019).

Personality traits and psychological factors significantly influence elite players' performance, with outcomes shaped by both environmental interactions and genetic predispositions (O'Neill et al., 2022). Cognitive control helps athletes prevent negative thoughts that undermine self-confidence and concentration, while maintaining focus under pressure is vital for task execution (Kruyt & Grobbelaar, 2019; Piepiora et al., 2020; Nicolescu, 2021).

Self-esteem has also been associated with psychological well-being. However, no significant differences have been observed between athletes in individual versus team sports. In professional hockey players, studies highlight positive correlations between emotional regulation, emotional intelligence, and self-confidence, and negative associations with cognitive anxiety, underlining the role of emotional intelligence in competitive states (Tinckler et al., 2021).

Decision-making under time pressure requires motor intelligence and technical ability, but repeated high-stress situations may lead to impulsive and risky actions. Psychological skills such as motivation, confidence, commitment, focus, adaptability, and self-regulation are therefore crucial in rugby talent identification and transition to elite levels (McAuliffe, 2021; Kerr, 2019; Dohme et al., 2017). These attributes allow players to respond effectively to competitive demands (Bitchell et al., 2020).

Lack of psychological resources, such as motivation, commitment, confidence, focus, and self-regulation, may hinder talent development in rugby, as consistently reported in previous studies (Dohme et al., 2019; Drew et al., 2019; Cowden et al., 2016). A study of 24 female rugby sevens players from Canada and Wales emphasized that rugby fosters a sense of empowerment, offering confidence, challenge, self-control, and opportunities to demonstrate gender equality (Kim et al., 2023).

MATERIAL AND METHODS

The purpose of the present study is to analyze the levels of self-perception among Romanian female Rugby Sevens players, both juniors and seniors, by identifying potential differences according to their performance level. We hypothesize that female Rugby Sevens players generally exhibit high levels of self-perception. Furthermore, we assume that differences in self-perception exist between club players and those competing for the national team.

Participants

The study included 97 female Rugby Sevens players participating in the 2024 edition of the Romanian National Championship: 29 senior players with a mean age of 21.1 ± 4.8 years and 68 junior players with a mean age of 15.2 ± 1.5 years. The study was approved by the Ethics Committee, and informed consent was obtained from all participants prior to their inclusion in the research.

Procedure and materials

Self-perception was assessed using the PAS Questionnaire: Perceptions and Self-Attitudes. The PAS questionnaire assesses four key aspects of an individual's psychological profile and their tendency to respond honestly or distort answers: self-image, self-esteem, self-efficacy, achievement, facade tendency, self-deception, self-presentation, exaggeration, self-depreciation, gratitude, regrets, and moral integrity (honesty, sincerity, morality). Each of the four dimensions is measured using 21 items grouped into three factors. Extreme scores on the first three scales may indicate potential positive or negative response distortions, while high scores on the Moral Integrity scale can alert to issues with honesty and moral flexibility (Constantin et al., 2022).

Data analysis

Statistical analyses were performed with IBM SPSS Statistics 20, applying the Shapiro–Wilk test, Kolmogorov–Smirnov test, Frequencies, Independent-Samples T Test, and the nonparametric Mann–Whitney U test.

RESULTS

Hypothesis testing 1

Junior rugby player

To determine the absolute and relative frequencies of the variables, the Frequencies test was applied, enabling the identification of trends in the psychological characteristics of junior rugby players.

The analysis of self-image, including self-esteem, self-efficacy, and achievement, indicates that players generally hold a positive perception of themselves. High frequencies of positive responses in the self-esteem dimension suggest that athletes evaluate their value and competencies optimistically. Regarding self-efficacy, most players (35%) consider themselves capable of achieving their goals, supporting the enhancement of sport performance. However, 25% reported lower scores, which may indicate reduced confidence and difficulties in maintaining focus during competition. Additionally, athletes tend to value and frequently recognize personal achievements, reflecting a strong motivation essential for performance development (Fig. 1.a).

The distribution of responses regarding the facade tendency shows that most junior players (80%) scored between 5 and 10, suggesting an overly positive self-image. High self-deception scores further indicate an idealized self-assessment, while lower concern for self-presentation reflects greater authenticity but also potential disinterest in team image. Conversely, 37% reported higher concern, pointing to reliance on external validation. Regarding exaggeration, 58% displayed a realistic self-perception, whereas 31% tended to overstate achievements and abilities (Fig. 1.b).
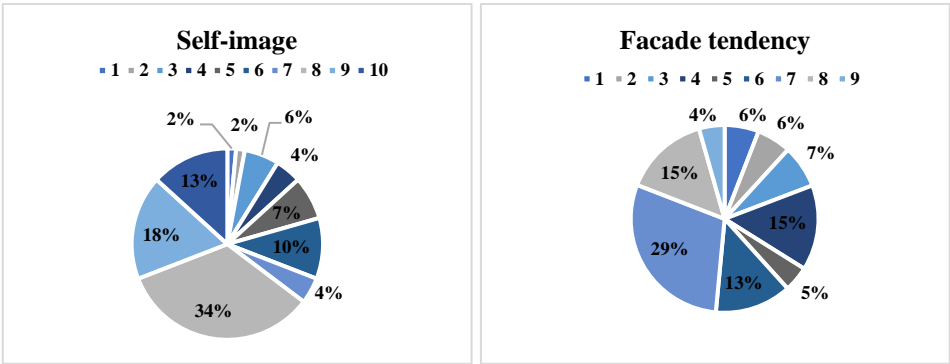

Fig. 1. Frequency of responses for size (a) self-image; (b) facade tendency

In the self-devaluation facet, 62% of players scored low (1–3), suggesting optimism and a lack of major regrets. Gratitude showed predominantly low scores (63%), indicating a more individualistic perspective and limited appreciation for external support, while 37% reported higher values, reflecting reduced awareness of contributions from coaches, teammates, and family. High regret scores (57%) suggest frequent reflection on mistakes or missed opportunities, potentially undermining confidence, whereas 43% may display stronger emotional regulation or avoidance of responsibility. Regarding self-depreciation, 59% reported positive self-perceptions and a sense of accomplishment, while 24% showed discouragement and pessimism (Fig. 2.a).

High moral integrity among junior rugby players is evident, with 77% demonstrating well-defined values that likely enhance team cohesion and a healthy competitive climate. Honesty scores were also high (70%), indicating that athletes value sincerity in sport and daily life. Elevated scores in honesty and morality facets (79%) suggest that players take responsibility for their actions and adhere to clear ethical principles both on and off the field (Fig. 2.b).
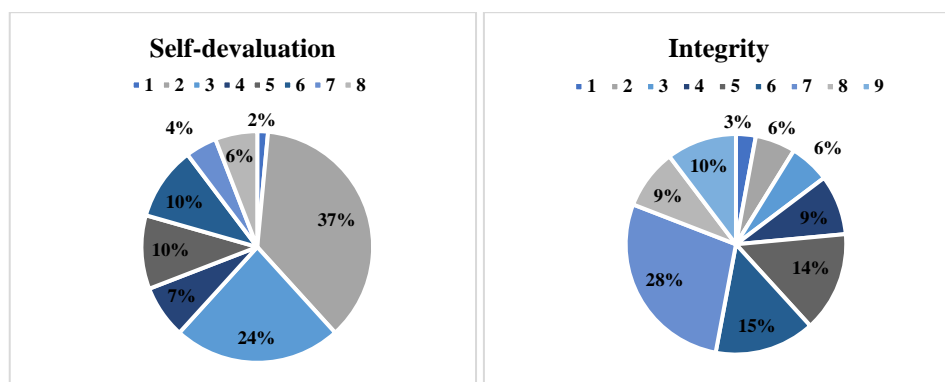

Fig. 2. Frequency of responses for size (a) self-devaluation; (b) integrity

Senior rugby player

The frequency analysis of psychological characteristics among senior rugby players highlights generally positive self-perceptions, though with notable variability. Regarding self-image, 21% of players reported high scores (8–9), 17% reached the maximum (10), while 14% scored lower, suggesting fluctuations influenced by past experiences, results, or team context.

Self-esteem was also high, with 38% of athletes reporting very strong self-worth, although 14% indicated moderate or lower confidence. Similarly, self-efficacy was strongly represented: 41% scored high, demonstrating belief in their ability to manage competitive challenges, while 17% showed moderate levels.

In terms of perceived achievement, nearly half of the athletes (48%) expressed high satisfaction with their sports accomplishments, whereas smaller groups reflected either moderate (17%) or lower satisfaction (10%), indicating ambition for further growth or partial dissatisfaction.

The analysis of facade tendencies revealed that many athletes are concerned with image management. Thirty-eight percent scored high on self-presentation, suggesting a tendency to project a favorable, sometimes exaggerated, image, while 24% reported moderate scores. Self-deception was also evident, with 15% achieving maximum values and 19% showing moderate-to-high levels, pointing to an optimistic self-evaluation of abilities.

For self-presentation specifically, over half of the players expressed moderate-to-high concern with how they are perceived, a trait potentially beneficial in competitive contexts. Conversely, exaggeration received low scores in most cases (72% scoring 1–3), indicating responsibility and commitment to team tasks without seeking excessive recognition.
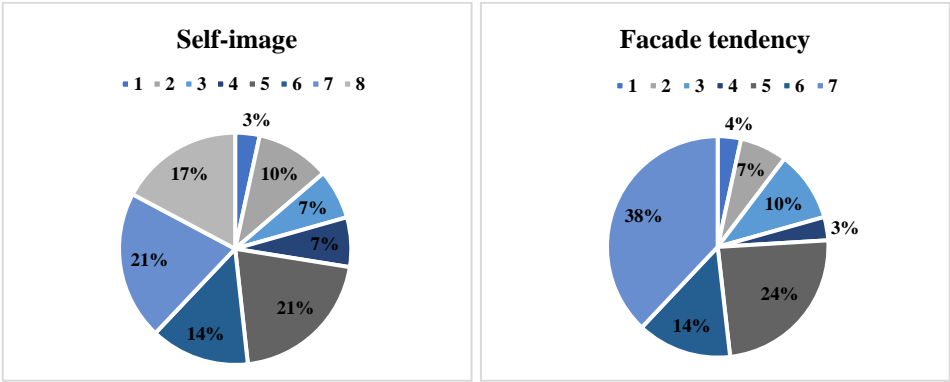

Fig. 3. Frequency of responses for size (a) self-image; (b) facade tendency

The analysis of self-depreciation shows that most senior rugby players avoid negative self-evaluation, with 72% reporting low scores (1–3). This suggests a healthy self-perception, protective of both mental health and athletic performance. Similarly, low regret scores (72%) indicate that players are not strongly burdened by past experiences, maintaining a forward-looking mindset beneficial for competition.

Gratitude was also prominent, as 66% of athletes reported low scores (1–3), reflecting a strong sense of thankfulness toward others' support. Only a minority demonstrated moderate levels of gratitude (10%), indicating variability in how athletes acknowledge external contributions to their success.

Integrity-related traits emerged as particularly strong. A large majority scored high on integrity (76%), sincerity (86%), honesty (83%), and morality (90%), underlining the importance of respect, fairness, and authenticity in rugby. These values appear deeply ingrained in the players' mindset, reinforcing both individual conduct and collective cohesion essential for team sports.
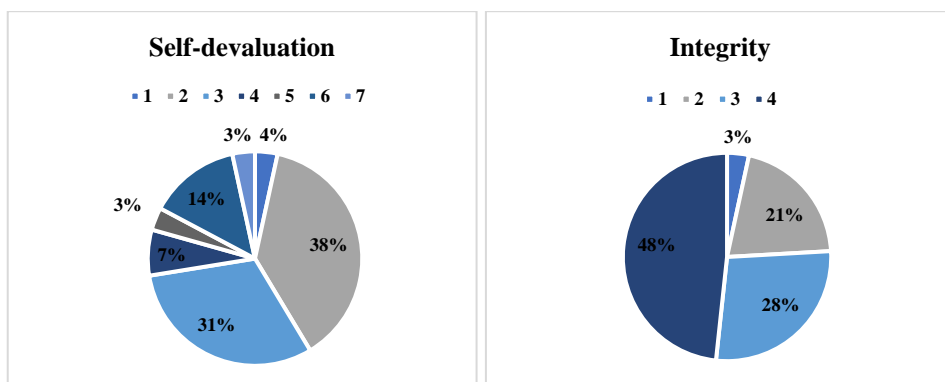

Fig. 4. Frequency of responses for size (a) self-devaluation; (b) integrity

Hypothesis testing 2

Junior rugby player

The normality of the data distribution was assessed using the Kolmogorov–Smirnov test for club players and the Shapiro–Wilk test for players from the Romanian national junior team. To identify differences in the psychological characteristics evaluated between club and national team junior players, the nonparametric Mann–Whitney U test was applied (Table 1), as the data distribution was not normal.

Table 1 presents a comparison between club and national team junior players in terms of self-perception, facade tendencies, self-depreciation, and moral integrity. Differences between group scores were not statistically significant (p > 0.05).

National team players exhibited a more positive self-image and lower tendencies toward self-depreciation, which may reflect experience gained at higher competitive levels. Facade tendencies were slightly higher among national team players, but differences were not significant, indicating similar social presentation strategies across groups.

Gratitude was higher among club players, while regrets and self-depreciation were similar between the two groups. Specifically, gratitude was slightly higher in club players (M = 3.5) compared to national team players (M = 2.8), but the difference was not statistically significant (p = 0.199). Regret levels were nearly identical between groups (p = 0.824), suggesting that both club and national team players have similar levels of decision reassessment. Self-depreciation was also similar (p = 0.713), indicating comparable levels of self-criticism across both groups.

Moral integrity was more pronounced among national team players, reflecting greater concern for ethics and fair play. Sincerity and honesty were similar across groups, suggesting that these values are consistently maintained among all players. Morality was stronger in national team players, who scored significantly higher (M = 6.7) compared to club players (M = 5.4), with the difference reaching statistical significance (p = 0.021), indicating a heightened commitment to rule adherence and ethical principles.

Table 1. Analysis of self-perception and attitude among club players and those who are part of the Romanian national junior team - nonparametric Mann–Whitney U test

		M	MR	P
SELF-IMAGE	Club players	7,2	33,11	0,283
	National team	7,7	39,03	
Self-esteem	Club players	5,8	33,63	0,506
	National team	6,2	37,31	
Self-efficacy	Club players	5,6	33,71	0,540
	National team	5,8	37,06	
Achievement	Club players	5,3	33,49	0,442
	National team	5,8	37,78	
FACADE TENDENCY	Club players	6,5	33,88	0,632
	National team	7,1	36,53	
Self-deception	Club players	5,5	33,53	0,458
	National team	5,9	37,66	
Self-presentation	Club players	3,9	33,20	0,322
	National team	4,4	38,72	
Exaggeration	Club players	4,3	35,39	0,497
	National team	4,0	31,59	
SELF-DEVALUATION	Club players	3,9	35,41	0,480
	National team	3,3	31,53	
Gratitude	Club players	3,5	36,17	0,199
	National team	2,8	29,06	
Regret	Club players	3,4	34,79	0,824
	National team	3,3	33,56	
Self-deprecation	Club players	3,3	34,98	0,713
	National team	3,0	32,94	

		M	MR	P
MORAL INTEGRITY	Club players	6,6	32,27	0,088
	National team	7,7	41,75	
Sincerity	Club players	5,2	32,05	0,059
	National team	6,1	42,47	
Honesty	Club players	5,1	34,20	0,820
	National team	5,3	35,47	
Morality	Club players	5,4	31,48	**0,021**
	National team	6,7	44,31	

M=mean; MR=mean rank; p=p value

Senior rugby player

The normality of the data distribution was assessed using the Shapiro–Wilk test for both club players and players from the Romanian national team.

For senior rugby players, to highlight differences in psychological characteristics between club and national team players, two statistical tests were applied. For the exaggeration facet, where the data distribution was normal, the Independent-Samples T Test was used (Table 2).

Analysis of the exaggeration facet indicates that national team players (M = 4.44) tend to have a more idealized perception of their own performance compared to club players (M = 3.73), which may be influenced by their experience in international competitions. However, the difference was not statistically significant, suggesting that the tendency to exaggerate is similarly present among club players (Table 2).

Table 2. Analysis of the exaggeration subscale between club players and those who are part of the Romanian senior national team - Independent-Samples T Test

		M		SD	p
Exaggeration	Club players	3,73	±	2,24	0,315
	National team	4,44	±	1,54	

M=mean; SD=Std. dev.; p=p value

The analysis of other psychological parameters was conducted using the nonparametric Mann–Whitney U test, as the data distribution was not normal.

National team players exhibited a more positive self-image, which may be explained by their greater competitive experience and higher performance level. The difference was statistically significant (p = 0.004), suggesting that selection and participation in international competitions contribute to increased self-confidence (Table 3).

Members of the senior national team were less prone to self-depreciation, providing a psychological advantage in competition. Club players were slightly more self-critical (M = 3.27) compared to national team players (M = 3.22), which may affect their performance and motivation.

National team athletes perceived themselves as having higher achievement levels, with differences between groups being statistically significant (p = 0.001). This perception may motivate greater engagement in training and competitions and is likely influenced by access to international competitions and recognition of performance (Table 3).

The facade tendency dimension was higher among national team players, suggesting greater concern for public image. Regarding moral integrity, the mean score was higher for national team players, indicating a stronger commitment to fair-play values. Differences between groups in these two dimensions were not statistically significant (p = 0.294 and p = 0.290, respectively) (Table 3).

Table 3. Analysis of self-perception and attitude among club players and those who are part of the Romanian senior national team - nonparametric Mann–Whitney U test

		M	MR	P
SELF-IMAGE	Club players	6,00	9,23	**0,004**
	National team	8,28	18,53	
Self-esteem	Club players	5,27	10,23	**0,015**
	National team	6,94	17,92	
Self-efficacy	Club players	6,36	13,05	0,312
	National team	6,78	16,19	
Achievement	Club players	6,45	8,36	**0,001**
	National team	7,94	19,06	
FACADE TENDENCY	Club players	7,36	12,95	0,294
	National team	8,56	16,25	
Self-deception	Club players	7,45	18,91	**0,039**
	National team	6,17	12,61	
Self-presentation	Club players	5,18	14,32	0,729
	National team	5,28	15,42	
SELF-DEVALUATION	Club players	3,27	17,05	0,290
	National team	3,22	13,75	
Gratitude	Club players	2,91	13,59	0,478
	National team	3,50	15,86	
Regrets	Club players	3,36	18,32	0,092
	National team	2,50	12,97	
Self-deprecation	Club players	2,64	16,91	0,322
	National team	2,22	13,83	
MORAL INTEGRITY	Club players	9,36	16,23	0,513
	National team	9,11	14,25	
Sincerity	Club players	7,36	15,45	0,806
	National team	7,28	14,72	

		M	MR	P
Honesty	Club players	7,18	14,05	0,604
	National team	7,39	15,58	
Morality	Club players	7,64	17,27	0,211
	National team	7,28	13,61	

M=mean; MR=mean rank; p=p value

DISCUSSION

The results confirm generally high levels of self-perception and self-confidence among Romanian female Rugby Sevens players, with differences between juniors and seniors influenced by competitive experience and psychological maturity. Junior players demonstrated strong motivation and positive self-esteem, though some showed a tendency toward idealized self-image, suggesting the need for targeted psychological support. Senior athletes exhibited more balanced self-perception and stronger moral integrity, reflecting advanced psychological development.

It should be emphasized that few studies have explored self-confidence and self-perception among female rugby players, particularly across age categories and within the Romanian context. This scarcity of research highlights the exploratory and original nature of the present study.

CONCLUSIONS

This study revealed generally high levels of self-perception and self-confidence among female Rugby Sevens players, emphasizing the crucial role of psychological factors in athletic performance. Differences between club and national team players confirm the positive influence of competitive experience on self-image and perceived achievement. Given the limited research in this area, especially in Romanian rugby, further studies are recommended to explore psychological dimensions such as self-efficacy and mental resilience among female athletes.

The analysis of questionnaire responses indicates a generally high level of motivation and engagement among junior rugby players. Moral integrity emerged as a defining dimension, reflecting a culture of fair play and respect consistently internalized by athletes. Rugby fosters strong ethical principles, integrity, sincerity, honesty, and morality, which are well established among both junior and senior players.

National team juniors showed a more positive self-image and higher self-efficacy, suggesting greater confidence in their abilities. Slightly higher facade tendencies indicate increased concern for public image, while club players reported more gratitude but also greater self-depreciation, implying a stronger need for

external validation. Moral integrity was more pronounced among national team players, suggesting that exposure to international competition strengthens fair-play values and responsibility. The tendency to exaggerate was also higher among national team members, possibly reflecting the pressure and expectations of elite performance, whereas lower self-depreciation scores indicate better stress management and self-confidence.

AUTHOR CONTRIBUTIONS

All authors have equal contribution.

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