

## ENGAGEMENT AND SOCIAL NETWORKS OF THE ASOBAL LEAGUE CLUBS IN 2023

## EL ENGAGEMENT Y LAS REDES SOCIALES DE LOS CLUBES DE LA LIGA ASOBAL EN EL AÑO 2023

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Engagement and SNS of the Asobal League

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**Abstract**

Social networks bring the club closer to its fans and followers, and therefore, to its customers. As a result, this study aims to examine the different social networks used by Asobal League clubs, as well as to analyze the degree of engagement on Instagram (Ei) and Twitter (Et) as dependent variables, and whether independent variables such as the ranking at the end of the season, victories, years since the club was founded, and the number of spectators, are able to explain the engagement. The study involved 10 professional clubs in the 2022/23 season, and statistical tests such as Pearson's correlation models, simple linear regressions and multiple linear regressions were performed. The results show that the relationship between the variables Ei and Et is positive and statistically significant. The relationship between the explanatory variables and Engagement is not significant. It is noteworthy that Barça Handbol had the highest number of victories in the competition and yet the lowest Engagement. Despite the increase in studies on the effects of social networks, it is necessary to continue analyzing predictor variables of the degree of engagement of followers in order to achieve more stable and beneficial relationships.

**Keywords:** Engagement, handball, social networks, facebook, twitter.

**Resumen**

Las redes sociales acercan al club a sus aficionados y seguidores y, por tanto, a sus clientes. Consecuencia de ello, este estudio pretende examinar las diferentes redes sociales que utilizan los clubes de la Liga Asobal, así como analizar el grado de engagement en Instagram (Ei) y Twitter (Et) como variables dependientes y, si variables independientes como el ranking a la finalización de la temporada, las victorias, los años desde la fundación del club y el aforo de espectadores son capaces de explicar el engagement. En el estudio han participado 10 clubes profesionales de la temporada 2022/23 y se han ejecutado pruebas estadísticas como los modelos de correlación de pearson, regresión lineal simple y múltiple. Los resultados muestran que la relación entre las variables Ei y Et es positiva y estadísticamente significativa. La relación entre las variables explicativas y el Engagement, no son significativas. Destaca que Barça Handbol presenta el mayor número de victorias de la competición y los Engagement más bajos. A pesar del aumento de estudios sobre los efectos de las redes sociales, es necesario que se continúe analizando variables predictoras del grado de engagement de los seguidores con el fin de alcanzar relaciones más estables y beneficiosas.

**Palabras Clave:** Engagement, balonmano, redes sociales, facebook, twitter.

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## Introduction

Social networks have aroused interest as an advertising medium since their emergence, as a consequence of the digitalization process to which the world has been subjected. The Internet of Things, Blockchain, artificial intelligence, Virtual Reality, and many more technologies are driving and fueling the new digital paradigm (Paruthi et al., 2023). As a result, these technological advances, accompanied by various social networks, have become an important part in customers' lives.

Traditional media are gradually losing ground, in favor of, essentially, the use of the Internet, which is establishing itself as the most valued and credible medium for consumers. The consolidation of the smartphone as an essential device in everyday life is one of the main pillars of this new social paradigm (Montaña et al., 2020). The trend is unstoppable: smartphones, streaming, subscriptions, e-commerce and online platforms such as social networks. In Western society, brands have the possibility and, therefore, the obligation to tell what is happening.

In this new world, the digital consumer has become the protagonist and main axis of great changes. Traditional users can be considered passive, as they have not had the will to produce and consume at the same time (Jordán et al., 2017). Now, the opportunities for connectivity and dynamism have led to the emergence of a different and much more powerful and qualified consumer. This new consumer's behavior is associated with a more informed user profile, with a higher level of education, more reflective, who seeks to minimize risks, and who wants security and simplicity in the purchasing process. The emergence of new information technologies (ICTs) has meant that consumers require a greater number of inputs to be able to compare a product or service and learn about it (Montaña et al., 2020). New consumers live twenty-four hours a day, seven days a week, on social networks, interacting with other people, and of course, with their favorite brands.

In recent years, engagement, or level of commitment to the brand, has become one of the most important and influential aspects in marketing and social networks of stakeholders, through which a company can converse and interact with stakeholders; fans, players, sponsors, and investment groups (Winell et al., 2023). Today's postmodern society seeks satisfaction through needs that bring together a much more active role within the consumption and communication process (Di Gangi & Wasko, 2016). Therefore, Benito-Colio et al. (2022), in Spanish basketball, and Romero-Jara et al. (2023), in the framework of international soccer, have tried to explain some key factors that explain the degree of participation and interaction between clubs and fans, with Instagram, X (formerly Twitter), and Facebook, being the most important social networks, respectively. Along the same lines, this has even been extrapolated to sports media, which also seek the figure of a reader that is much more involved in the content that is published in order to generate a link (Seeger et al., 2023), and a relationship of interest and interaction. This is due, in large part, to the fact that social networks and relationship marketing go hand in hand, focusing their strategies on building and maintaining solid links with customers in the long term (Achen, 2023).

All of this shapes the figure of the prosumer. This word is the combination of producer and consumer, a portmanteau coined in 1980 (García-Galera & Valdivia, 2014). The current consumer of social networks contrasts opinions, disseminates topics with different perspectives, influences and his or her opinions reach many followers, resulting in learning and new knowledge. In addition, the engagement of customers with the brand is gaining more and more attention, as they actively participate in the development of new services and products, as reflected in the works by Achen et al., (2023), Monferrer et al. (2019) and Rather et al., (2018). In the same vein, Lee and Na (2023) reveal how social networks have even generated a new form of sports consumption due to FOMO (fear of missing out), provoking in consumers the need to be continuously connected with other fans while watching live sports on screens.

López-Carril et al. (2019) conceptualizes social media, focusing on the numerous possibilities they offer to enhance management, as well as to personalize communication and generate emotional involvement with its different and diverse stakeholders. In this case, the best indicator of effectiveness and efficiency is their engagement and the different alternatives to generate conversations with them and learn first-hand about their needs (Sixto et al., 2017).

The concept of engagement, which is shown as an increasingly frequent object of study from the fields of psychology and marketing to other areas of communication (Ballesteros-Herencia, 2019), has undergone several modifications over time, from being linked to an employee of the company, as it probably originates in the 90s (Herrera-Torres et al., 2017) to be associated to customers. Likewise, authors such as Van Doorn et al. (2010) suggest a reflection and understanding of the concept as the manifestation of customer behavior towards the brand. Therefore, customer behavior is much more than just the purchase, but the result of different factors and motivational aspects, recommendations, customer service, blogs or opinions. Thus, we arrive at a key concept for social networks and the digital consumer that measures the exchange of knowledge and interaction (Vivek, 2009). It can be defined as an "interactive and bidirectional process between subjects (citizens, workers, customers, social network users) and a corporation (public administration, company or other type of association). With respect to individuals, this would imply a cognitive state that manifests itself in the form of facts, attitudes, gestures, opinions, actions or, in the case of social networks, as "likes", "shares" or "comments", among others, which allow us to gauge the degree of engagement with the institution (Fissi et al., 2023).

Building engagement for any sports club today is necessary, because the more loyal the fans, the greater the future success. The greater their loyalty, the greater their tolerance for the failures of their favorite club or brand, and therefore, the greater the accessibility to the emotional part of the follower's brain, for the relationship between the purchase of products and services and needs (Achen, 2016). Likewise, this has been shown by Steiner et al. (2023) in their research, when the purchase intention of the product or service is directly affected by the degree of user participation in social networks.

The rise of Instagram and X (formerly Twitter) in the sports sector is particularly significant. In the case of Instagram, it is worth noting that the latest study (IAB Spain) reflects how it has established itself as the social network that has generated the most interaction in the last year. On its part, X, together with Instagram, stands out as one of the main formats and communication channels that incentivizes the young and adolescent social audience (Adá-Lameiras & Rodríguez-Castro, 2022). Just when sporting events are drivers of sustainable development goals, integrating themselves day by day in today's communities and societies (Sánchez-Sáez, 2019), their visibility and promotion becomes indispensable for their success and impact. Einsle et al. (2023) show that the emergence of social networks represents an important growth opportunity for small and modest entities in terms of visibility, dissemination and publicity.

Given the above, and the digital context of daily use of social networks within which the world finds itself, that a deep and specific analysis of the use, measurement and control of the effects of engagement that occurs in the Asobal League handball clubs is necessary. This analysis will be conducted by using the same methodology and tools as other studies on basketball clubs of the ACB Endesa League, by the authors Herrera-Torres et al. (2017) or Caro et al. (2021), to determine the relationship between engagement through the use of social networks and the practice of physical exercise in municipal sports centers in Barcelona.

Accordingly, the objective of this research is to examine Instagram and X engagement in the Asobal League, and to analyze whether there is any correlation between it and the position in the league ranking, the number of victories, and the number of spectators in their sports halls in the 2022/23 season.

## Materials and Methods

### Participants

The sample of the present study is composed of professional clubs that were selected by means of non-probabilistic sampling, specifically intentional or by convenience, that compete in the first division of handball in Spain (Liga Asobal) in the 2022-2023 season ( $n = 10$ ).

### Instruments

An observation sheet is used to collect all the data necessary for the analysis. First, in order to have an overview of the use of social networks by the clubs analyzed in the study, notes were collected on their presence on various platforms (Facebook, Instagram, X, YouTube, and TikTok). After identifying and qualifying the different clubs and their use of the different platforms mentioned above, significant data was taken in order to obtain the engagement ratio of each sample according to Instagram and X.

To obtain the data, the digital marketing instrument Rival IQ (2023) tool was used, which has been utilized in other empirical studies (Benito-Colio et al., 2022; García-Fernández et al., 2017; Herrera-Torres et al., 2017). It allows analyzing metrics in the different social networks with the objective of obtaining conclusions about the level of engagement of the audience (followers) with the brand, in this case the different clubs. The formulas proposed are as follows: To obtain the engagement ratio on Instagram, a calculation is made through the average number of interactions (likes and comments) per publication, per follower, in all publications published during the selected period of time, expressed as a percentage. The X engagement ratio is calculated using the average number of interactions (retweets, likes, and replies) per tweet, per follower, in all tweets published during the selected time period, expressed as a percentage.

### Procedure

Data collection took place at the start of the 2023-2024 season. However, in order to obtain more accurate conclusions, the qualifying ranking of the 2022-2023 season was taken as a reference. The engagement ratio for both X and Instagram referred to a 30-day period between September 8 and October 7, 2023.

### Data Analysis

To achieve the research objectives, engagement data on Instagram and X are obtained through the formulas proposed by Rival IQ (2023). Finally, an analysis was performed using a simple linear regression model to obtain the correlation matrix. Likewise, to show the independent variables (ranking in the standings in the 2022/23 season, number of victories in the 2022/23 season, spectator capacity, years since the club was founded) and their association with the dependent variable (engagement), a multiple linear regression was used. All the analyses were performed with the SPSS 29.0.1.0 statistical package.

## Results

To analyze the relationship between the variables that form part of the study, a Simple Linear Regression model is used, from which the correlation matrix was obtained, and to examine how the independent variables (ranking in the standings in the 2022/23 season, number of wins in the 2022/23 season, spectator capacity, years since the club was founded) explained the dependent variable (engagement on Instagram, on the one hand, and, on the other, engagement on X), the a Multiple Linear Regression model was run.

**Table 1**  
*Official social profiles of Asobal League handball clubs in the 2022/2023 season*

Club	F	I	T	Y	T
Barça Handbol	X	X	X	X	X
Rebi BM. Cuenca	X	X	X	X	
Fraikin BM. Granollers	X	X	X	X	
CD Bidasoa Irún	X	X	X	X	
Bathco BM. Torrelavega	X	X	X	X	
BM Ángel Ximénez-Puente Genil	X	X	X	X	
TM Benidorm	X	X	X	X	
Recoletas Atl. Valladolid	X	X	X		X
Balonmano Sinfín	X	X	X	X	X
Helvetia Anaitasuna	X	X	X	X	

\*Note: F = Facebook; I = Instagram; T = Twitter; Y = YouTube; T = Tik Tok.

Table 1 shows that 100% of the sample had official profiles on Facebook, Instagram, X, 90% ( $n = 9$ ) had profiles on YouTube, and only 30% ( $n = 3$ ) on TikTok.

**Table 2**  
*Asobal League handball clubs according to ranking in the 2022-23 season, victories in the 2022-23 year, years since their foundation, spectator number capacity, and engagement on Instagram and X*

Club	R	V	A	Af	Ei	Et
Barça Handbol	1	30	80	7500	0.65	0.041
Rebi BM. Cuenca	2	19	34	1900	2.81	0.15
Fraikin BM. Granollers	3	18	79	5685	3.46	0.31
CD Bidasoa Irún	4	19	61	2700	4.47	0.26
Bathco BM. Torrelavega	6	15	21	3000	3.93	0.35
BM Ángel Ximénez-Puente Genil	8	14	39	1085	2.39	0.14
TM Benidorm	9	11	29	3000	2.63	0.099
Recoletas Atl. Valladolid	10	11	9	3502	2.43	0.21
Balonmano Sinfín	12	9	19	4000	2.76	0.15
Helvetia Anaitasuna	13	9	67	3000	3.58	0.24

Note: R = Qualifying ranking in the 2022-23 season; V = Victories in the 2022-23 season; A = Years since the club was founded; Af = Spectator capacity; Ei = Engagement on Instagram; Et = Engagement on X

Table 2 shows the data in relation to each of the participants in the sample, in terms of their position on the leaderboard of the fully completed 2022-23 season, the number of victories achieved in the 2022-23 season, the years since the foundation of the entity, the spectator capacity of the facilities where official matches are played, and, finally, the engagement ratio on Instagram and X.

First, a logical numerical relationship was found between the variables, between ranking in the classification and the number of victories, as observed in the case of Barça Handbol ( $n = 30$ ) and Rebi BM. Cuenca ( $n = 19$ ). Balonmano Sinfín and Helvetia Anaitasuna occupied the lowest positions in the ranking table and had the lowest number of victories ( $n = 9$ ). It is obvious that a better classification was obtained when there was a higher number of victories.

Regarding the years since the foundation of the club, the longest-lived clubs analyzed were Barça Handbol, 80 years, and Fraikin BM. Granollers, 79 years. They were followed by Helvetia Anaitasuna, 67 years, and CD Bidasoa Irún, 61 years. The rest of the clubs lagged far behind, with Recoletas Atl. Valladolid, founded only nine years ago, being the youngest of the sample.

With respect to the data on spectator capacity of each of the sports pavilions or facilities that host the matches, the most frequent value that appeared, which became the trend, was the capacity of 3000 spectators. Only Barça Handbol distances itself from the rest, with a capacity of 7,500, together with Fraikin BM. Granollers, which has a capacity of 5,685.

Regarding the engagement data on Instagram, CD Bidasoa obtained the highest value ratio (4.47), followed by other clubs such as Fraikin BM. Granollers (3.46), Bathco BM. Torrelavega (3.93) and Helvetia Anaitasuna (3.58). The lowest values were obtained by Barça Handbol (0.65), with a large difference with respect to the rest of the clubs analyzed.

Regarding X engagement, the highest value was obtained reached by Bathco BM. Torrelavega (0.35), closely followed by Fraikin BM. Granollers (0.31). On the other hand, Barça Handbol (0.041) has the lowest value.

To verify the presence of a correlation between the variables ranking in the 2022-23 season, number of victories in the 2022-23 season, years since the foundation of the club, and spectator capacity, with engagement on Instagram and X, Pearson's correlation test was performed, which determined the presence of only two statistically significant correlations ( $p < .05$ ). One of them was between the variables R (Ranking in the 2022-2023 season), and V (number of wins in the 2022-2023 season), which is not surprising. And on the other hand, between the variables "Ei" (engagement on Instagram) and "Et" (engagement on X).

It is important to note that the value was negative, because the variable "ranking in the 2022-2023 season" is measured from 1 to 16, with 1 being the highest value and 16 the lowest.

**Table 3**  
*Results obtained in the Pearson correlation test with the entire sample*

		R	V	A	Af	Ei	Et
R	Pearson Correlation	1	-.902**	-.466	-.364	.172	.049
	Sig. (2-tailed)		< .001	.175	.301	.634	.892
	N	10	10	10	10	10	10
V	Pearson Correlation	-.902**	1	.596	.574	-.429	-.271
	Sig. (2-tailed)	< .001		.069	.083	.216	.449
	N	10	10	10	10	10	10
A	Pearson Correlation	-.466	.596	1	.532	-.062	-.008
	Sig. (2-tailed)	.175	.069		.113	.864	.983
	N	10	10	10	10	10	10
Af	Pearson Correlation	-.364	.574	.532	1	-.483	-.178
	Sig. (2-tailed)	.301	.083	.113		.157	.622
	N	10	10	10	10	10	10
Ei	Pearson Correlation	.172	-.429	-.062	-.483	1	.833**
	Sig. (2-tailed)	.634	.216	.864	.157		.003
	N	10	10	10	10	10	10
Et	Pearson Correlation	.049	-.271	-.008	-.178	.833**	1
	Sig. (2-tailed)	.892	.449	.983	.622	.003	
	N	10	10	10	10	10	10

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

Subsequently, to analyze the variables that were predictors of the model in relation to engagement on Instagram, a Multiple Linear Regression was performed, where the coefficient of determination (R2) was .579, indicating that these variables explain almost 60% of the engagement on Instagram. For this, the variable engagement on Instagram was determined as the dependent variable and ranking in the 2022/23 season, number of victories in the 2022/23 season, spectator capacity, and years since the foundation of the club, as independent variables.

**Table 4**  
*Model of predictor variables of the dependent variable Instagram and engagement X with the entire sample*

Model	R	R Square	Adjusted R	Std. Error of the Estimate	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
INSTAGRAM	Constant	.761 <sup>a</sup>	.579	.243	.914559	8.559	2.992	2.861	.035
	R				-.284	.185	-1.144	-1.531	.186
	V				-.267	.144	-1.622	-1.847	.124
	A				.020	.015	.494	1.304	.249
	Af				.000	.000	-.230	-.571	.593
TWITTER	Constant	.613 <sup>a</sup>	.376	-.123	.102237	.720	.334	2.154	.084
	R				-.030	.021	-1.309	-1.438	.210
	V				-.026	.016	-1.749	-1.634	.163
	A				.001	.002	.332	.719	.504
	Af					9.003E-6	.000	.173	.351

Note: a. Predictors: (Constant) Af, R, A, V. b. Dependent Variable: Ei, Et

Se it is observed that none of the variables obtained a significance value of less than  $< .05$ . Therefore, the increase in engagement on Instagram is not explained by these variables in a statistically significant manner.

Regarding engagement on X, the same procedure was implemented to analyze the correlation between the aforementioned variables and engagement on X, where the coefficient of determination ( $R^2$ ) was .376, indicating that these variables explain almost 40% of the engagement on X. Thus, the variable engagement on Instagram was determined as the dependent variable, and ranking in the 2022/23 season, number of victories in the 2022/23 season, spectator capacity, years since the foundation of the club, as independent variables.

As in the previous case, these did not explain the variable engagement on Twitter. Thus, the increase in X engagement was not significantly explained by these variables.

It is interesting that in some cases, as shown in Table 2, the clubs that occupy the higher positions in the ranking, such as Fraikin BM. Granollers, CD Bidasoa Irún, and Bathco BM. Torrelavega had more engagement, along with a higher number of victories and a better position in the ranking. However, Barça Handbol, leader in the ranking table, obtained very low engagement rates, such as 0.65% on Instagram and 0.041% on X. For this reason, in order to examine possible alterations of the model, Barça Handbol was removed from the sample.

Clearly, the Pearson correlation test data with the sample excluding Barça Handbol once again showed a statistically significant correlation between the variables "R" and "V". In addition, a higher correlation was observed between "R" and "V" with respect to "Ei" and "Et", as the Pearson's coefficient result was higher than when Barça Handbol was included in the calculation of this index. This indicates that the higher the position in the 2022-23 league table (and the greater the number of victories in the 2022-23 season), the higher the engagement ratio on Instagram and X. However, a significance between the variables was not found.

The other statistically significant relationship was also observed in the fact that the higher the engagement ratio on Instagram, the higher the engagement ratio on X and vice versa. However, with a lower correlation value than when the sample included Barça Handbol. The variable with the highest correlation with engagement on Instagram was Years since the club was founded. In the case of engagement on X, the variable with the highest correlation was the number of spectators in the sports facilities. However, neither of the cases was statistically significant.

Similarly, to verify the variables that were predictors of the model in relation to engagement on Instagram, a Multiple Linear Regression was performed, where the coefficient of determination ( $R^2$ ) was .536, indicating that these variables explained almost 50% of the engagement on Instagram. For this, the variable engagement on Instagram was determined as the dependent variable, and ranking in the 2022/23 season, number of victories in the 2022/23 season, spectator capacity, years since the foundation of the club as independent variables.



**Table 5**  
 Results obtained in the Pearson correlation test with the altered sample (without Barça Handbol)

		R	V	A	Af	Ei	Et
R	Pearson Correlation	1	-.978**	-.301	-.003	-.333	-.304
	Sig. (2-tailed)		< .001	.431	.993	.382	.427
	N		9	9	9	9	9
V	Pearson Correlation	-.978**	1	.390	-.063	.436	.350
	Sig. (2-tailed)	< .001		.299	.872	.241	.355
	N	9	9	9	9	9	9
A	Pearson Correlation	-.301	.390	1	.284	.539	.370
	Sig. (2-tailed)	.431	.299		.458	.134	.327
	N	9	9	9	9	9	9
Af	Pearson Correlation	-.003	-.063	.284	1	.199	.448
	Sig. (2-tailed)	.993	.872	.458		.607	.227
	N	9	9	9	9	9	9
Ei	Pearson Correlation	-.333	.436	.539	.199	1	.755*
	Sig. (2-tailed)	.382	.241	.134	.607		.019
	N	9	9	9	9	9	9
Et	Pearson Correlation	-.304	.350	.370	.448	.755*	1
	Sig. (2-tailed)	.427	.355	.327	.227	.019	
	N	9	9	9	9	9	9

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

**Table 6**  
 Model of predictor variables of the dependent variable engagement Instagram and engagement X with the altered sample (without Barça Handbol)

	Model	R	R Square	Adjusted R	Std. Error of the Estimate	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
INSTAGRAM	Constant	.761 <sup>a</sup>	.579	.243	.914559	8.559	2.992		2.861	.035
	R					-.284	.185	-1.144	-1.531	.186
	V					-.267	.144	-1.622	-1.847	.124
	A					.020	.015	.494	1.304	.249
	Af					.000	.000	-.230	-.571	.593
TWITTER	Constant	.613 <sup>a</sup>	.376	-.123	.102237	.720	.334		2.154	.084
	R					-.030	.021	-1.309	-1.438	.210
	V					-.026	.016	-1.749	-1.634	.163
	A					.001	.002	.332	.719	.504
	Af					9.003E-6	.000	.173	.351	.740

Note: a. Predictors: (Constant) Af, R, A, V. b. Dependent Variable: Ei

In turn, the variables did not have a p-value < .05, so the increase in engagement on Instagram could be explained by the variables in a statistically significant manner.

In the case of X, the coefficient of determination (R<sup>2</sup>) was .481, indicating that these variables explained almost 50% of the engagement on X. Due to this, the variable engagement on X was determined as the dependent variable, and ranking

in the 2022/23 season, number of victories in the 2022/23 season, spectator capacity, years since the foundation of the club as independent variables. The data indicate that the variables did not have a  $p$ -value  $< .05$ , and thus, the increase in X engagement, the dependent variable, could not be explained by the independent variables.

## Discussion

The purpose of this research was to analyze the use of social networks by professional handball clubs in the Asobal League, and to distinguish the levels of engagement generated between followers and official profiles on Instagram and X.

A remarkable management in the use of social networks brings positive effects to different branches of the sports world. Impregnated with relational marketing (Achen, 2023), they are a great gauge of the commitment and loyalty of followers, and therefore, potential customers, of a brand or sports club thanks to the information and statistics they provide with the feedback between brand-follower (Miranda, 2021).

Sports in Sweden have already observed positive results through the remarkable management of these digital platforms, as observed in the national skateboarding, basketball, and equestrian federations (Broms, 2023). We find a similar case in Spanish basketball (Benito-Colio et al., 2022) and international soccer (Romero-Jara et al., 2023), where efficient and effective social media management has benefited both institutions and clubs. Along these lines, in handball, where data for the year 2023 show official profiles of clubs such as Barça (more than 4,000,000 followers on Facebook) or Fraikin BM. Granollers (more than 8,500 followers on Facebook), there is an urgent need to measure and use the concept of engagement in order to understand the degree of interaction of the different users who visit the official profiles of the brands.

However, the number of followers does not determine consumer engagement. For this reason, the engagement ratio has become a very important variable to be considered by managers and directors of sports clubs (López-Carril et al., 2019).

The clubs analyzed have a presence in three or more social networks (Facebook, Twitter, Instagram, YouTube, or TikTok). Despite the fact that TikTok became, on the day of its launch in 2016, a free App with more than 100 million users, 2 billion downloads and in more than 75 languages (Anderson, 2020), and numerous companies from different sectors have been joining this platform (Villena et al., 2020), the data obtained in this study illustrate that the clubs analyzed are not yet benefiting from the participation, promotion, and marketing of their products and services among their followers.

Instagram and, to a lesser extent, X, continue to occupy the top positions in the ranking, as illustrated in the latest 2023 social network study conducted. The growth of TikTok continues with its inertia since 2020, increasing its spontaneous (from 37% in 2022 to 43%) and suggested (from 75% to 82%) knowledge, and usage (from 30% to 36%) (IAB Spain, 2023), corroborating the findings found in the very low levels of engagement of the Asobal League handball clubs on X, where optimal minimum levels (1 and 2%) have been not reached, according to the methodology.

In the case of X, there is considerable homogeneity in terms of the ratios of the clubs analyzed, where none reached the minimum required. However, in the case of Instagram, the values obtained were more in line with what is required (1 and 5%), according to Hootsuite (2023). Therefore, these positive values in terms of the engagement ratio on Instagram indicate that there is a beneficial and positive relationship between the clubs and their followers through this medium. Similarly, it was observed that there is a bidirectional relationship with the follower, giving rise to the aforementioned figure of the prosumer, where the social profile not only has a direction in the transmission of information, from the club to the follower, but there is also a return relationship, from the follower or fan to the club itself, as Lee and Kim (2022) demonstrate in one of their works. The presence of a large volume of followers in social networks of the different Spanish handball clubs confirms the findings of Lee and Na (2023). In this new digital environment, fans not only watch the match live, but also comment on it with other fans by being present in social networks.

While it is true that engagement on Instagram and X cannot be explained by any of the variables analyzed, parallel studies predict that the "V" and "R" variables explain the increase in engagement in the aforementioned social networks, as observed occurs in the ACB League (similar in category to the ASOBAL League but in Spanish basketball) (Herrera-Torres et al., 2017), where a positive correlation has been observed between the number of victories and engagement in the social networks Facebook and X, with a stronger relationship in X, giving rise to what Stavros et al. (2014) commented, with respect to social networks being tools that facilitate and encourage consumers to become passionate about the club when there are better sports results.

The findings on the levels of engagement of the Asobal League handball clubs may be due to the recent incorporation of the clubs to social networks, as well as the lack of professionalization of managers and sports managers and, therefore, of the communication teams, as Nogueras et al. (2022) states. However, this is striking, since these virtual platforms can easily influence consumer-fans, and therefore, the promotion and marketing of services, product, and brand recognition of the club, as stated by Steiner et al. (2023) and Achen et al., (2023). Likewise, it may also be due to the fact that clubs in the middle



of the table or even in the lower part have higher engagement ratios than the best ranked clubs in some cases, which does not occur in Spanish basketball, as demonstrated by Benito-Colio, et al. (2023).

Although the topic investigated is highly topical and necessary for sports clubs' communication managers to be aware of it, it has major limitations. The first of these is the reduced period of data collection, since it only refers to the last 30 days. Similarly, the analysis of the data could be much more complete, but some values are only accessible from the administration panel by the technical managers of each of the clubs. All of this prevents a more complete view of user interaction on social networks. Therefore, adapted metrics have been used that only consider public and external data. In addition to the above, the limited specific literature on this subject should be mentioned.

In spite of this, the various limitations mark a path for future research within the field of study, which continues to show evidence of the positive relationship that exists between the appropriate use of social networks and handball. The use of only the variables ranking in the 2022-23 season, number of victories in the 2022-23 season, years since the foundation of the club and, spectator capacity, does not explain the shifts in the Instagram and X engagement variables, which indicates that there may be many other variables that may have an impact on interactions with fans, and ultimately, with the impact on handball sports organizations.

An interesting variable to measure would be the economic potential of each club, which was among the possible variables under study, but due to the impossibility of accessing private and internal budgets of a sufficient sample of clubs, it was eliminated from the possibilities. The economic potential can allow a club to invest more in the communication and social media management department, both in human means, such as the number of members and their professionalization, and in technical means, such as various tools to implement the actions. However, Einsle et al. (2023) demonstrate that the visibility and promotion of the brand with the use of social networks is a much more accessible investment than more archaic methods, thus enabling access to small or modest clubs.

## Conclusions

The results obtained in this study indicate that presently, all the professional clubs analyzed were already immersed in the digital world of social networks, with a greater or lesser participation in the different platforms. Their presence was found in at least three of the four social networks analyzed, with Facebook, Instagram and X being the ones with official profiles of all the clubs.

Regarding engagement, despite providing interesting figures, the rates achieved on Instagram and X, the ranking, victories, spectator capacity, and the number of years since the club was founded, explain the movements in interactions with fans with a positive, but not significant, relationship between the engagement variables and the other variables. This is because there are clubs that despite being in the middle or at the bottom of the table, had more followers as compared to those that occupy higher positions in the ranking table.

The case of Barça Handbol is worth mentioning, because despite being the club with the largest budget and the best position in the ranking, and the highest number of victories, it had very low levels of engagement.

The homogeneity of the data both in the clubs with the highest number of victories and positions in the ranking and those with the lowest sporting performance, did not show clear evidence in their relationships with consumers, brand followers, or fans.

However, due to the fact that the relationship between engagement on Instagram and engagement on X was significant, those responsible for sports clubs are urged to understand that a greater investment on online communication and social networks, both in economic resources and suitable professionals, could increase the number of fan interactions thanks to the synergies of a multiplatform and omnichannel connected world. This work shows the need to continue adapting and incorporating to the new digital world, as it is currently the most essential and modern tool to connect with followers and consumers of today. Therefore, when there is a higher engagement ratio, the clubs will be more knowledgeable about their consumers and fans and will be able to obtain a 360° view of the customer, which will provide them with a real segment of the population to which marketing approaches could be applied.

The study reveals an interesting opportunity for the managers of the various social networks that they do not have in other sports disciplines, given the association between victories and ranking and engagement. In the case of handball, other factors promote interaction and the link with the club and the brand itself. It is necessary for club managers to continue investing in communication with their clients and followers to get to know them better and meet their needs, in addition to achieving a greater economic performance of their teams.

The results obtained from this study should arouse interest in the Asobal League itself, and the managers and communication managers, who should understand this new scenario to take actions that are already successful in other

sports, such as sharing relevant information about training sessions, matches, events, and results; creating and nurturing the community to generate daily participation; using a new way to advertise and promote products and merchandising, services or the official matches themselves, to increase ticket sales; improving brand positioning; increasing the visibility of the club or promoting sponsors. (Cereda, 2023; Chaltoute & Elmorchid, 2023; Keplek & Starzyczná, 2018; Nogales, 2006; Segarra et al., 2017).

Lastly, this work reflects the obligation to follow the changes of these variables both in the Asobal League and in other competitions, to corroborate their influence on the engagement of professional clubs, as well as to analyze the reality provided by a globalized and connected world as a result of social networks, which have become the meeting and contact point for society.

## Ethics Committee Statement

Not applicable because the research study does not involve the participation of human subjects, either directly or through the use of their biological material or medical records.

## Conflict of Interest Statement

The authors declare no conflict of interest.

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## Authors' Contribution

Conceptualization D.B. & C.C.; Methodology D.B.; Software D.B.; Validation D.B., C.C. & R.B.; Formal Analysis D.B. & A.G.; Investigation D.B. & C.C.; Resources R.B.; Data Curation A.G.; Writing – Original Draft D.B.; Writing – Review & Editing D.B.; Visualization C.C.; Supervision R.B. & A.G.; Project Administration D.B. & C.C.; Funding Acquisition D.B., R.B. & A.G. All authors have read and agreed to the published version of the manuscript.

## Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author [chavarria@euosuna.org](mailto:chavarria@euosuna.org)

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