

<https://doi.org/10.23913/ride.v15i29.2155>

*Scientific articles*

## **Habilidades socioemocionales y su impacto en redes sociales en el Siglo XXI**

***Social and emotional skills and their impact on social networks in the 21st  
century***

***Competências socioemocionais e seu impacto nas redes sociais no século  
XXI***

**Claudia Berra Barona**

Universidad Autónoma de Baja California, México

[claudia.berra@uabc.edu.mx](mailto:claudia.berra@uabc.edu.mx)

<https://orcid.org/0000-0002-9069-4012>

### **Resumen**

Hoy en día las redes sociales desempeñan un papel significativo en la forma en la que se comunican y relacionan las personas en la sociedad actual, cambiando y modernizando los esquemas de interacción a nivel personal y profesional; ello implica la utilización de habilidades socioemocionales: interpersonales, intrapersonales y cognitivas, por lo que el objetivo de esta investigación es “medir el impacto de las redes sociales (variable independiente) en el desarrollo de habilidades socioemocionales (variable dependiente) bajo la siguiente hipótesis “el uso de redes sociales tiene un impacto favorable en el desarrollo de habilidades socioemocionales en alumnos de nivel superior”.

Para comprobar esa hipótesis, se recurre a un modelo de ecuaciones estructurales utilizando el software SPSS y AMOS, los resultados de los coeficientes de correlación y de regresión estandarizados confirman el alto grado de correlación existente entre las variables que integran la dimensión de Habilidades Socioemocionales (interpersonales, intrapersonales y cognitivas) y Redes Sociales con coeficientes de correlación por arriba de (.60).

Las conclusiones de esta investigación pueden tener implicaciones significativas para la educación, la formación profesional y la promoción de un uso más consciente y equilibrado

de las redes sociales en la sociedad. También podría ayudar a comprender cómo adaptar y mejorar las habilidades interpersonales, intrapersonales y cognitivas en un mundo cada vez más digitalizado.

**Palabras clave:** habilidades socioemocionales, ecuaciones estructurales, redes sociales.

## Abstract

Nowadays, social networks play a significant role in the way people communicate and relate in today's society, changing and modernizing the interaction patterns at a personal and professional level; this implies the use of social and emotional skills: interpersonal, intrapersonal and cognitive, so the objective of this research is to "measure the impact of social networks (independent variable) on the development of social and emotional skills (dependent variable) under the following hypothesis "the use of social networks has a favorable impact on the development of social and emotional skills in university students."

To test the hypothesis, a structural equation model is used using the SPSS and AMOS software, the results of the standardized correlation and regression coefficients confirm a degree of correlation high between the variables that make up the dimension of Social and emotional Skills (interpersonal, intrapersonal and cognitive) and Social Networks with correlation coefficients above (.60). The findings of this research may have significant implications for education, vocational training and promoting a more conscious and balanced use of social media in society. It could also help to understand how to adapt and improve interpersonal, intrapersonal and cognitive skills in an increasingly digitalised world.

**Keywords:** social and emotional skills, structural equations, social networks.

## Resumo

Hoje em dia, as redes sociais desempenham um papel significativo na forma como as pessoas comunicam e se relacionam na sociedade atual, alterando e modernizando os padrões de interação a nível pessoal e profissional; Isto implica a utilização de competências socioemocionais: interpessoais, intrapessoais e cognitivas, pelo que o objetivo desta investigação é "medir o impacto das redes sociais (variável independente) no desenvolvimento de competências socioemocionais (variável dependente) sob o seguinte hipótese" "O uso das redes sociais tem impacto favorável no desenvolvimento de competências socioemocionais em estudantes de nível superior."



Para testar essa hipótese, utiliza-se um modelo de equações estruturais utilizando os softwares SPSS e AMOS. Os resultados dos coeficientes de correlação e regressão padronizados confirmam o alto grau de correlação entre as variáveis que compõem a dimensão Habilidades Socioemocionais (interpessoais, intrapessoais e) cognitivo) e Redes Sociais com coeficientes de correlação acima (0,60). As conclusões desta investigação podem ter implicações significativas na educação, na formação profissional e na promoção de uma utilização mais consciente e equilibrada das redes sociais na sociedade. Poderia também ajudar a compreender como adaptar e melhorar as competências interpessoais, intrapessoais e cognitivas num mundo cada vez mais digitalizado.

**Palavras-chave:** habilidades socioemocionais, equações estruturais, redes sociais.

**Date of Reception:** August 2024

**Acceptance Date:** November 2024

---

## Introduction

The context of higher education in the 21st century is characterized by a series of unprecedented challenges and opportunities. In an era marked by globalization and technological revolution, in the post-pandemic scenario, educational and professional environments are being transformed and public universities are in a crucial position to shape the educational future, where the rapid advancement of information technology, changing labor demands and the need to address pressing issues such as sustainability and equity have redefined the landscape for universities (Berra and Ramírez, 2021).

UNESCO's Sustainable Development Goals call for higher education to be more inclusive, accessible and relevant to a diverse and globalized student population, requiring a more inclusive and personalized approach to ensure equal opportunities.

Coupled with the demand for 21st century skills such as adaptability, critical thinking and digital literacy, in this context, public universities face the task of balancing academic tradition with pedagogical innovation, taking advantage of technology and promoting interdisciplinary research to address society's complex problems.

This dynamic occurs amid financial challenges, which entails the adoption of more flexible teaching approaches, the fostering of socio-emotional skills, such as emotional intelligence, critical thinking, creativity, teamwork, assertive communication, resilience and adaptation to change (Berra et al., 2022) among others, as well as the promotion of student mobility and international collaboration. It is necessary to adopt a strategic approach that

combines academic excellence with adaptability to the changing needs of society ( Altbach , 2020).

This is why, in the context of the 21st century, in terms of education, in addition to the use of technological tools, it is very important to incorporate the development of soft or socio-emotional skills (García *et al .*, 2020).

It is in this context that it is important to analyze the impact of socio-emotional skills on the use of social networks in the 21st century, since today their use plays a significant role in the implementation of collaborative work in today's society, changing and modernizing the way in which people collaborate on projects and jobs.

The use of social networks has represented multiple benefits, including communication between people beyond the geographic territory, the formation of communities of collaborators worldwide, improving and making collaborative work more efficient, which also represents an important challenge to give an adequate use to these tools, including aspects of confidentiality and information security.

Therefore, this research aims to analyze the impact of socio-emotional skills on the use of social networks in the 21st century.

### **Socio-emotional skills**

According to the World Economic Forum (2020), the skills that are expected to be in greatest demand in job profiles by 2025 are identified, in the context of the Fourth Industrial Revolution, marked by constant technological, scientific and social progress. These skills include socio-emotional competencies, which stand out as a key source of differentiation for human talent.

In the same context, the Organisation for Economic Co-operation and Development (OECD, 2016) has highlighted that social-emotional skills (HSE), also known as non-cognitive skills, are as important, or perhaps more so, than cognitive skills. When a person develops these skills throughout their life, they are given more opportunities for better performance in their educational career, as well as in their personal and professional life.

Promoting HSE is essential for student success Schleicher , 2020 refers to five domains: task execution, emotional regulation, open-mindedness, collaboration and interaction with others, which is why these types of skills are those that are also related to the ability to both manage and recognize our feelings and emotions, show empathy towards those around us, achieve positive relationships and achieve goals in personal and professional life;

When a person manages to develop these skills, they will have better self-control, will observe an improvement in interpersonal relationships and will be able to make decisions assertively and with greater responsibility (Secretaría de Educación Pública, 2021).

### **Classification of Socio-Emotional Skills**

Therefore, it is crucial and of great benefit to understand, analyze and identify the various classifications of socio-emotional skills necessary in the educational process (Araya and Garita, 2020); as well as to promote their application in the intrapersonal, interpersonal and cognitive spheres.

#### **Intrapersonal Skills**

Intrapersonal skills refer to a person's understanding of themselves, as well as their ability to identify and name their emotions, and use this knowledge to guide their behavior. These skills include self-awareness, self-regulation, adaptability, agency, self-esteem, and autonomy (Gardner, 1993).

#### **Interpersonal Skills**

Experts agree that social skills, also called interpersonal skills, are closely linked to the way a person interacts and relates to others within a society (Doyle, 2020). Included in this category are those related to leadership, motivation, flexibility, patience, teamwork, communication, work ethic, and time management, among others; these skills encourage a debate on the importance of developing both soft and hard skills to achieve success in personal, academic, and professional spheres ( Chaitanya , 2018).

#### **Cognitive Skills**

Thus, cognitive socio-emotional skills include skills such as critical thinking and problem-solving skills, which are related to information processing. It is important to mention that they are key variables associated with individual development and experiences. The way in which these skills are used will determine the level of sophistication in the management of interpersonal and intrapersonal relationships (Morales *et al.*, 2013).

The first theories on cognitive skills emerged in the 1950s in the Anglo-Saxon world. This concept, originating in the field of cognitive psychology, refers to the mental operations

through which a person internalizes both the content and the processes used (Frías *et al.*, 2017).

In the 1990s, interest in the study of cognitive abilities was renewed, albeit with a different focus. During this period, a new theory of thinking abilities emerged (skills). According to this perspective, thinking skills are considered those capacities that allow individuals to capture, process and interpret information (Frías *et al.*, 2017).

In the field of psychology studies, it is argued that thinking skills require cognitive resources to carry out operations with the mind. These resources do not develop spontaneously, but need to be fostered and cultivated through learning experiences and training processes.

It is stated (Frías *et al.*, 2017) that thinking skills are linked to mental processes, thus constituting a basis for learning; in essence, it is the capacity and ability to manage data transformation and discrimination processes to be converted into information.

## Social networks

A social network is defined as a social structure composed of a set of actors and a series of connections that reflect the social relationships between said actors (Sanandres, 2023). Social networks are characterized by exacerbating emotions of various kinds, from joy, envy, admiration, frustration, empathy, rejection, to name a few; therefore, all the emotions generated when using social networks, both positive and negative, are dimensioned from the individual's own formation, as well as their belief system, which can define various behaviors (González and Cardona, 2023).

Social media has established itself as a tool predominantly used by young people (Pérez *et al.*, 2023). According to the Digital in 2022 report by the We Are Social agency (2022), in 2021 there were 4.62 billion social media users worldwide: Facebook remains the most used platform globally, with 2.91 billion users; followed by YouTube with 2.562 billion; WhatsApp with 2 billion; Instagram with 1.468 billion; TikTok with 1 billion; and Twitter with 436 million (González and Cardona, 2023).

## Twitter

Twitter is an online platform designed to connect people by allowing users to send and read text-based messages known as "tweets," which are limited to 140 characters. Users can instantly follow other people or topics of interest, gain followers, and create or participate in discussions about new topics. Users can also retweet other users' messages, either privately (visible only to a specific recipient) or publicly (visible to all followers). Users can also interact publicly with other users by mentioning (@), including links to longer content (text, video, or images), and uploading images and videos directly to the platform.

## LinkedIn

LinkedIn is a social networking platform with an exclusive focus on the professional field. Its main purpose is to connect professionals from different industries and facilitate the expansion of professional contact networks, as well as maintaining those connections over time, in order to obtain benefits throughout the working career, promoting both employment and professional development. It is through an individual profile that a LinkedIn user highlights aspects of their academic training, work experience and skills and abilities; to showcase themselves and establish contact with potential employers ( Alhabash and Ma, 2017).

For the above reasons, this social network is now a very valuable resource for finding and obtaining jobs, while being able to share content related to the industry and also stay up to date on the latest trends in the labor field. In short, LinkedIn is a social network designed to boost opportunities and professional growth by facilitating connection and collaboration between professionals around the world.

## Snapchat

Snapchat is a popular social network that stands out for its focus on ephemeral messaging and creative visual content. Unlike other platforms, Snapchat allows users to send messages, photos, and videos that disappear after being viewed by the recipient, providing a sense of privacy and authenticity in online interactions. Its most distinctive feature is the "stories" feature, which allows users to share moments from their everyday lives through a series of images and videos that are automatically deleted after 24 hours. Additionally,

Snapchat offers a wide range of filters and augmented reality effects that allow users to personalize and beautify their content ( Dhir , 2018).

It is especially popular among young people and has evolved beyond simple messaging to include news content, entertainment, and celebrity collaborations. Snapchat represents a unique and ephemeral form of communication in the digital age and has influenced the way people share experiences and express themselves online ( Fradkin *et al.*, 2017).

## **Telegram**

Telegram is an instant messaging platform that stands out for its focus on privacy and communications security. It allows users to send text messages, images, videos, and files quickly and in an encrypted manner, ensuring a high degree of confidentiality in conversations. In addition to individual and group conversations, Telegram offers thematic channels where users can join to follow and discuss a wide variety of topics, from news to entertainment and technology ( Kuss and Griffiths, 2017). With millions of users worldwide, Telegram has emerged as a popular communication platform, especially among those who prioritize online security and confidentiality ( Simon and Carah , 2017).

## **Be Real**

BeReal is a French social media app that was launched in 2020. Created by Alexis Barreyat and Kevin Perreau , this platform began to gain popularity among Generation Z in early 2022.

Social media in the 21st century has had a massive impact on society, affecting the way we communicate, consume information, participate in politics, conduct business, and live our lives in general. Its influence is undeniable and continues to evolve as new platforms and technologies emerge.

In this sense, derived from the literature review, the following research objective is established: “to measure the impact of social networks (independent variable) on the development of socio-emotional skills (dependent variable) and the following hypothesis “the use of social networks has a favorable impact on the development of socio-emotional skills in university students”. To validate this hypothesis, a structural equation model is used.



## **Materials and methods**

### **Definition of study variables**

According to the literature presented, Social Networks is established as the independent variable and Socio-emotional Skills as the dependent variable.

#### **Exogenous or independent variable: social networks**

Social networks are web-based services that allow their users to create a profile, post messages and connect with other users from a virtual space. Through this virtuality, the user builds an identity to show themselves among the members of their virtual community (González and Cardona, 2023).

#### **Endogenous or dependent variable: socio-emotional skills**

Socio-emotional skills (SES) are tools that allow us to regulate our emotions and feelings as well as understand the emotions of others. SES help us to feel empathy, to create positive intrapersonal and interpersonal relationships, as well as to motivate ourselves to define goals and achieve them while developing cognitive skills.

## **Method**

The methodological design of the research is quantitative and correlational (Van Schalkwyk , 2023), since it quantifies the impact of the use of social networks on the development of socio-emotional skills in university students. The data are obtained through a questionnaire which is designed based on five dimensions with a Likert-type scale ( Nikmard *et al.* , 2023); these results support the structural model to determine compliance with the study hypotheses.

However, it should be mentioned that the topic has been little researched, so it is necessary to carry out an exploratory factor analysis to evaluate each of the scales that are integrated within the variables under study.

Subsequently, a structural equation model is carried out to measure the impact of social networks (independent variable) on the development of socio-emotional skills (dependent variable). For information processing, the statistical software SPSS and AMOS, both from the IBM company, are used to analyze the validity and statistical reliability in both

the exploratory factor analysis and the structural equation model, respectively (Min *et.al.* , 2021).

### Population, sample and sampling methods

The population considered in the study are young people who carry out their professional studies at the Faculty of Accounting and Administration (FCA) of the Autonomous University of Baja California (UABC), with a total enrollment of 4,618 students; it is important to mention that, due to such a student population, this school constitutes one of the most important business schools in northwestern Mexico (Coordination of Student Services and School Management of the Autonomous University of Baja California, 2022).

To calculate the sample size for the study subject, formula 1 is used, which with a 95% confidence level and a 5% margin of error determines 356 questionnaires to be applied, through simple random sampling, so that all students have the same probability of being study subjects.

$$n = \frac{N Z^2 p q}{d^2(N - 1) + Z^2 p q}$$

**Formula 1.** Calculation of representative sample size with finite universe

## Results

### Exploratory factor analysis

The statistical treatment of the results begins with an exploratory factor analysis to determine the scales that integrate the variables to be studied and their correspondence with the corresponding theoretical dimensions, through their representative factor loadings (Rogers, 2022). In Table 1, the loadings of each scale or item of the questionnaire in its construct can be identified.

**Table 1.** Rotated Component Matrix

Quiz Questions (observed variables)	Constructs (latent variables)			
	Social networks	Socio-emotional skills		
		Intrapersonal	Cognitive	Interpersonal
6. Twitter	.552			
12. Linked in	.686			
13. Snapchat	.752			
15. Telegram	.731			
16. Be real	.693			
19.- Do social networks allow you to self-regulate your emotions and feelings?		.585		
20.- When you use social networks, can you feel empathy for other people?		.791		
21.- Do social networks allow you to adapt to new challenges or constant changes in your environment?		.603		
22.- When you use social media, can you feel kindness in different situations?		.680		
30.- Do social networks allow you to establish relationships with other people effectively?				.692
31.- Do social networks allow you to develop your leadership effectively?				.801
32.- Do social networks allow you to manage work teams effectively?				.714
33.- Do you think that social networks promote the recognition of diversity?			.743	
34.- Do you think that social networks promote the inclusion of different abilities and thoughts?			.836	
35.- When you use social networks, do you think you			.613	

can thinking?	develop	critical				
------------------	---------	----------	--	--	--	--

Source: Prepared by the authors using SPSS software

In this sense, all factor loadings are above 0.55, which is considered by Abd-Rahman *et al.*, (2022), as viable for exploratory studies. This makes it possible for the questionnaire questions to be grouped into the 4 study factors: social networks and socio-emotional skills, which in turn is composed of interpersonal, intrapersonal and cognitive skills (Table 2).

Meanwhile, as can be seen in Table 2, the sum of squared factor loadings of all variables adds up to 56.60%, which means that the proposed factors explain more than 50% of the study phenomenon, which is admitted by Oamen (2021), within the framework of an exploratory factor analysis.

This means that more than 50 percent of the phenomenon under study is explained by the factors that make up the aforementioned proposed theoretical research model.

Thus, the variable Social Networks stands out as it is the independent variable of the present research. Likewise, the socio-emotional skills that, as a construct, integrate the dependent variables intrapersonal, cognitive and interpersonal skills, show an important presence within the total variance of the model.

**Table 2.** Total explained variance of the model.

Component	Sums of squared charge rotations	
	% of variance	% Total accumulated
Social networks	16.29	16.29
Intrapersonal	14.29	30.58
Cognitive	13.05	43.63
Interpersonal	12.97	56.60

Source: Prepared by the authors using SPSS software

### Structural equations

Structural equation models are a second-generation statistical technique applied to correlational studies in social sciences. They allow determining the degree of correlation between variables that make up the same construct and also the impact of one or more independent or predictor variables with respect to one or more dependent variables, to illustrate a cause-effect association ( Kansal and Aggarwal , 2023).

First, the internal consistency of the model must be analyzed. As shown in Table 3, this test determines the statistical reliability in the structural analysis of the data; for this purpose, the Chi-square indicator is divided by the degrees of freedom. Consequently, the quotient must yield a desired value less than 3 to estimate a good fit between the theoretical model and the statistical and/or structural model, respectively (Rochelle *et al.* , 2021). In this case, the value obtained corresponds to 1.79, so the model has internal consistency.

**Table 3.** Structural model adjustment

Chi Square	Degrees of Freedom	Significance (>0)	Chi Square/Degrees of Freedom Significance ( $\leq 3$ )
150.15	84	.000	1.79

Source: Own elaboration with AMOS software

The summary of the model fit obtained in the AMOS software also provides other fit indices necessary to validate the model (Table 4). For example, the comparative fit index establishes the relationship between the model variables.

Also the incremental adjustment that rules out the existence of a null model and when exceeded presents the standardized adjustment index that shows the proportionality of the model within the framework of a cause-effect relationship, where the independent variable expresses the degree of behavior of the dependent variable.

Last but not least, the variance not explained by the model by virtue of the degrees of freedom rules out any type of statistical bias. Thus, fit indicators accepted by Rakotoasimbola and Blili (2019) are achieved, for a model with a high degree of statistical reliability.

**Table 4.** Model fit indices

Variance not explained by the model per degree of freedom (0.04-0.08)	Normed Fit Index (>.9)	Incremental Adjustment Index (>.9)	Comparative Fit Index (>.9)
0.047	.902	.947	.946

Source: Own elaboration with AMOS software

It is important to highlight the familiarity between the three variables that make up the dependent dimension or construct (Socio-emotional Skills). Table 5 shows the standardized correlation coefficients between intrapersonal, interpersonal and cognitive skills, which confirms the theoretical postulates that establish them in the same construct,

since they show a correlation greater than .60.

Furthermore, the level of significance indicates that the estimate is reliable since no indicators are perceived above the permitted error margin of 5% (0.05), following the Eisaku-Oho parameters. *et al.*, (2021).

**Table 5.** Standardized correlation coefficients of the dimensions of the  
Socio-emotional skills

Dimension		Dimension	Estimate (>0)	Significance (≤0.05)
Intrapersonal	↔	Cognitive	.61	.000
Interpersonal	↔	Intrapersonal	.69	.000
Interpersonal	↔	Cognitive	.68	.000

Source: Own elaboration with AMOS software

below , which graphs the results of the standardized correlation and regression coefficients respectively. It confirms, with an oblique arrow, the high degree of familiarity between the variables that make up the dimension of Socioemotional Skills (interpersonal, intrapersonal and cognitive) with correlation coefficients above (.60).

In Figure 1, the straight arrow shows a positive impact, although moderate since it does not exceed (.30) of the regression coefficient ( Bhaktha and Lechner, 2021) which are statistically validated with the significance level of .000 (Table 6).

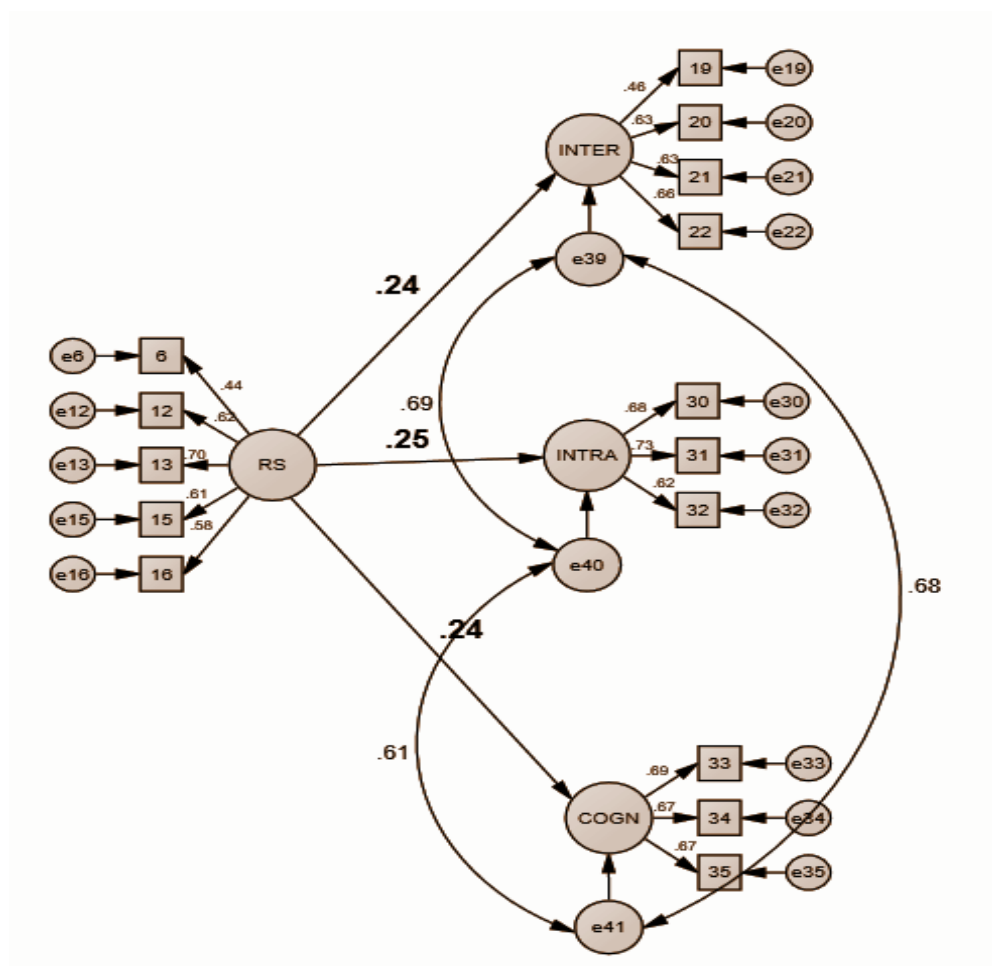
It is important to mention that the regression coefficients, established with a straight arrow in Figure 1, determine the degree of impact of an independent variable: social networks (SR) with respect to three dependent variables: interpersonal skills (INTER); intrapersonal skills (INTRA) and cognitive skills (COG).

In this sense, the indicator assumes values between -1 and 1, where if it assumes values below 0 it is understood as a negative relationship; while above 0 is a positive relationship, the closest to 1 being greater.

Finally, if the regression coefficient is equal to 0, it is expressed as a null relationship; for these reasons, the regression coefficient within the Structural Equation Models is a viable option to evaluate the behavior of the study hypotheses since if the indicator is greater than 1, the study hypothesis is fulfilled.

The above can be seen in Figure 1. Structural Equation Model (SPSS AMOS, 2024) presented below:

**Figure 1.** Structural Equation Model



Source: Own elaboration with SPSS AMOS

Both Figure 1 and Table 6 illustrate the standardized regression coefficients that assess the impact of social networks on the three dimensions of socio-emotional skills investigated. First, it should be noted that the values are above zero, which meets the proposed study hypothesis, since the standardized regression coefficient is greater than 0.

Likewise, the degree of significance establishes the possibility of reaching a more extreme indicator than the one observed, assuming that equality marks the null hypothesis; the result of .000 expresses excellent behavior.

According to the values obtained in the standardized regression coefficients, a moderate impact is observed between the independent and dependent variables ( Bhaktha and Lechner, 2021).

**Table 6.** Standardized Regression Coefficients

Independent Variable		Dependent Variable (Socio-emotional Skills)	Standardized Regression (>0)	Significance ( $\leq 0.05$ )
Social networks	→	Interpersonal	.24	.000
	→	Intrapersonal	.25	.000
	→	Cognitive	.24	.000

Source: Own elaboration with AMOS software

## Discussion

Once the research objective has been verified, the research hypothesis is accepted, since the result of the coefficient of the exogenous variables with respect to the endogenous one is greater than zero.

Based on the results of the research, it is established that the statistical model of structural equations validates the proposed hypothesis when comparing the predictive model. This model confirms the relationship between socio-emotional skills and their impact on social networks.

The results of this research show us that socio-emotional skills are a fundamental component in interaction on social networks, particularly the development of relationship skills with other people, allowing the transmission of ideas, thoughts and even emotions in a clear way, as well as the consideration of aspects of the individual's own culture that allows them to develop the ability to recognize diversity, in addition to leadership skills that according to Coluccio and Muñoz (2021), the use of social networks is positively related to performance, whereby virtual communities are constituted as the places of interaction of the actors that make up the digital ecosystem.

The proliferation of social media and user participation positively influence communication strategies (Castro-Higueras *et al.* , 2024). The relationship between social media and the free expression of ideas is complex and multifaceted. On the one hand, social media has significantly expanded the reach and accessibility of the free expression of ideas around the world (Suárez and Pastor, 2023); it allows people to share their thoughts, opinions, and perspectives with a global audience instantly and often without geographical restrictions, including skills such as empathy which influence the relationship between social media use and communication (León *et al.* , 2022).



Social media has largely democratized the expression of ideas by allowing a wide range of voices to have access to a global audience. However, this freedom is also faced with challenges, such as censorship, misinformation, and polarization. The relationship between social media and the free expression of ideas is an ever-evolving topic that raises important questions about regulation, ethics, and impact on society, as well as the impact it has on communication (López *et al.*, 2022).

Likewise, social networks have sensitized society to the need for self-regulation of emotions, since technology as part of a stimulus triggers pleasant and unpleasant emotions that the individual must learn to regulate by having a sophisticated action, which is called Emotional Intelligence (Gardner, 1993).

## Conclusions

The study managed to analyse the impact of social networks on the development of socio-emotional skills, based on the hypothesis that the use of these platforms favours the development of these skills in university students. The data obtained from the standardised correlation and regression coefficients showed a significant correlation between the variables that form the dimension of Socio-emotional Skills (interpersonal, intrapersonal and cognitive) and Social Networks.

When human beings incorporate socio-emotional skills into their daily lives, they improve competencies such as leadership, team management, development of capabilities and different thinking, recognition of diversity, kindness, empathy, adaptability, critical thinking skills, among others.

Thus, socio-emotional skills are defined by the fact of being capable and skilled in identifying and managing what we feel, and showing empathy for the people around us while relating positively to establish and achieve goals and objectives. These skills are lifelong, as they promote self-control, improve interpersonal relationships, and encourage more responsible decision-making.

The development of these skills throughout a person's life provides greater opportunities to improve their performance in academic, personal and professional fields (OECD, 2016), therefore, soft or non-cognitive skills are equally important or even more important than cognitive skills.

Socio-emotional skills represent a key element that distinguishes human talent from the possibility of being replaced by technology and facilitates the capacity for reinvention. In the current era of digital disruption, Advances in learning and the generation of knowledge are experiencing accelerated growth (Ponga, 2018), so it is evident that educational models must adapt and evolve towards innovative models that make it possible for students to acquire the skills and abilities required in the 21st century.

In addition to technological skills, socio-emotional skills will also be in high demand in the labour market. It is estimated that more than one billion jobs, representing approximately one third of the global workforce (OECD, 2016), will likely see a shift in required skills over the next decade, with the main cause being the technological revolution.

Our success in facing today's challenges depends on our ability to acquire and develop cognitive skills (critical thinking, problem solving, recognition of diversity, creativity and innovation, among others), as well as intrapersonal skills (talent management, emotional intelligence, judgment and decision making) and interpersonal skills (complex problem solving, coordination with others, service orientation, negotiation, communication and collaboration), among others.

And in this sense, social media has taken on great relevance by becoming a form of communication, of relating and of daily expression. While it has empowered many people to share their opinions and experiences, it has also posed challenges in terms of misinformation, censorship and tone of online conversations. The way in which social media platforms address these challenges and balance freedom of expression with responsibility and safety will have a significant impact on the relationship between social media and socio-emotional skills.

The findings of this research may have significant implications for education, vocational training and promoting a more conscious and balanced use of social media in society. It could also help to understand how to adapt and improve interpersonal, intrapersonal and cognitive skills in an increasingly digitalised world.

### **Future lines of research**

It is suggested to carry out research on the guidelines and requirements necessary to facilitate access to educational offerings mediated by technology, incorporating tools used in social networks, including variables such as educational platforms (LMS), social networks and artificial intelligence tools; it is also recommended to carry out research that addresses

the issue of the influence of socio-emotional skills through social networks in Organizational Development in the 21st century, incorporating socio-emotional skills, social networks and organizational development as study variables.

## References

- Abd-Rahman, N. F., Tuan-Kamauzaman, T. H., Nor- Arifin, W., y Md-Noh, A. Y. (2022). Development and psychometric evaluation of triage questionnaire (QTriX): Exploratory factor analysis and item response theory analysis. *Hong Kong Journal of Emergency Medicine*, 29(4), 227-235.  
<https://doi.org/10.1177/1024907920908366>
- Alhabash, S., y Ma, M. (2017). A tale of four platforms: Motivations and uses of Facebook, Twitter, Instagram, and Snapchat among college students? *Social Media + Society*, 3(2), 2056305117712291.
- Altbach (2020). Challenges for higher education in the 21st century. *Higher Education*, 79(6), 951-961.
- Araya-Fernández, E.; Garita-González, G. (2020). Habilidades blandas: elementos para una visión holística en la formación de profesionales en informática. *Trilogía Ciencia Tecnología Sociedad*, 12(23), 11-36. <https://doi.org/10.22430/21457778.1614>
- Barona, C. B., & Ramirez, M. R. (2021, June). Effects of COVID 19 lockdown on the use of LMS platforms for virtual education. In 2021 16th Iberian Conference on Information Systems and Technologies (CISTI) (pp. 1-6). IEEE, doi: 10.23919/CISTI52073.2021.9476645.
- Barona, C. B., León, Y. J. R., & Cruz, I. J. (2022, June). Effects of the Use of Virtual Learning Environments (PLE) on the Development of Social and Emotional Skills (DHS) in university students. In 2022 17th Iberian Conference on Information Systems and Technologies (CISTI) (pp. 1-7). IEEE. doi: 10.23919/CISTI54924.2022.9820002.
- Bhaktha, N. y Lechner, C. M. (2021). To Score or Not to Score? A Simulation Study on the Performance of Test Scores, Plausible Values, and SEM, in Regression With Socio-Emotional Skill or Personality Scales as Predictors. *Frontiers in Psychology*, 12, 1-22. <https://doi.org/10.3389/fpsyg.2021.679481>
- Castro-Higueras, A., Pérez-Rufí, J.-P., Rodríguez-Vázquez, A.-I. y López-García, X. (2024). Medios nativos digitales y sus comunidades virtuales: estrategias de

- interacción y participación en redes sociales. *El Profesional de La Información*, 33(1), 1-17. <https://doi.org/10.3145/epi.2024.0015>
- Chaitanya E, K. (2018). Soft Skills to Complement Professional Students' *Technical Skills to Enhance their Employability Rate*, 18, 52-60.
- Coluccio Piñones, G. y Muñoz-Pareja, M. (2021). Estudio del desempeño y liderazgo de estudiantes de ingeniería industrial usando análisis de redes sociales. *INGENIARE - Revista Chilena de Ingeniería*, 29(4), 735-742.
- Coordinación de Servicios Estudiantiles y Gestión Escolar (2022). Universidad Autónoma de Baja California
- Dhir, A., Yossatorm, Y., Kaur, P. y Chen, S. (2018). Online social media fatigue and psychological wellbeing—A study of compulsive use, fear of missing out, fatigue, anxiety and depression. *International Journal of Information Management*, 40, 141-152.
- Doyle, A. (2020). Hard Skills vs. Soft Skills: What's the Difference? *The Balance Careers*. <https://www.thebalancecareers.com/hard-skills-vs-soft-skills-2063780>
- Eisaku, O., Kazuhiko, S. y Sadao, Y. (2021). Highly Reliable Method to Obtain a Correlation Coefficient Unaffected by the SEM Noise Component for Examining the Degree of Specimen Damage due to Electron Beam Irradiation. *Scanning*, 2021. <https://doi.org/10.1155/2021/2226577>
- Foro Económico Mundial (2020). The Future of Jobs Report 2020. World Economic Forum. <https://www.weforum.org/reports/the-future-of-jobs-report-2020/digest/>
- Fradkin, A., Grewal, E., Holtz, D. y Pearson, M. (2017). Bias in online freelance labor markets: Evidence from TaskRabbit and Fiverr. *Management Science*, 64(12), 5463-5478.
- Frías, Haro y Artiles (2017). Las habilidades cognitivas en el profesional de la Información desde la perspectiva de proyectos y asociaciones internacionales. *Investigación Bibliotecológica Archivonomía Bibliotecología e Información*, 31(71), 201. <https://doi.org/10.22201/iibi.0187358xp.2017.71.57816>
- García, González y Muñoz (2020). Entornos personales de aprendizaje: un estudio comparativo entre profesores costarricenses en formación y en ejercicio. *Estudios Sobre Educación*, 39, 135-157. <https://libcon.rec.uabc.mx:4440/10.15581/004.39.135-157>
- Gardner, H. (1993). *Multiple intelligences: The theory in practice*. Basic Books.

- González Quintero, J. I. y Cardona-Restrepo, P. (2023). La posverdad y las redes sociales como desafíos del periodismo en la era digital. *Ánfora*, 30(55), 332-359.  
<https://doi.org/10.30854/anf.v30.n55.2023.977>
- Kansal, R., y Aggarwal, D. N. (2023). An Empirical Analysis in Analysing the Critical Factors Influencing the Health Insurance Business in Achieving Sustainable Development Using Structural Equation Model. *Emerging Technologies (GlobConET)*. IEEE IAS Global Conference On, 1-5.  
<https://doi.org/10.1109/GlobConET56651.2023.10150027>
- Kuss, D. J. y Griffiths, M. D. (2017). Social networking sites and addiction: Ten lessons learned. *International Journal of Environmental Research and Public Health*, 14(3), 311.
- León Rodríguez, D. A., Tobar Herrera, M. P., Hodeg Fernández de Castro, M. O. y Aguilar Mejía, O. M. (2022). Empatía, redes sociales e indicadores de salud mental durante las crisis sociales en Colombia. *Universitas Psychologica*, 21, 1-18.  
<https://doi.org/10.11144/Javeriana.upsy21.ersi>
- Lin, J. y Sutunyarak, C. (2023). The Influence of Social Support on Job Engagement Evidence from Preschool Teachers in Beijing. *Journal of Reproducible Research*, 2(1), 127-141. <https://journalrrsite.com/index.php/Myjrr/article/view/44>
- López Doblás, M., Gómez Domínguez, D., Pérez Corral, O. R. y Danet Danet, A. (2022). Comunicar en tiempos de pandemia: uso de las redes sociales y papel de las unidades de comunicación en cinco hospitales andaluces. *Revista Española de Comunicación en Salud*, 13(2), 155-172. <https://doi.org/10.20318/recs.2022.6630>
- Min, L; Yichao, S y Hailing, M. (2021). An Empirical Research on Construct and Influencing Factors of College Students' Blended Learning Power Based on SPSS 22 software and AMOS 24.0 software; 10.1109/ICAIE53562.2021.00094, 2021 2nd International Conference on Artificial Intelligence and Education (ICAIE), Artificial Intelligence and Education (ICAIE), 2nd International Conference on, ICAIE, Jun, 425-431.
- Morales Rodríguez, M., Benítez Hernández, M., y Agustín Santos, D. (2013). Habilidades para la vida (cognitivas y sociales) en adolescentes de zona rural. *Revista electrónica de investigación educativa*, 15(3), 98-113.

- Nikmard, F., Tavassoli, K. y Pourdana, N. Designing and validating a scale for evaluating the sources of unreliability of a high-stakes test. *Lang Test Asia* 13, 2 (2023).  
<https://doi.org/10.1186/s40468-023-00215-7>
- Bhaktha, N y Lechner, CM (2021) To Score or Not to Score? A Simulation Study on the Performance of Test Scores, Plausible Values, and SEM, in Regression With Socio-Emotional Skill or Personality Scales as Predictors. *Front. Psychol.* 12:679481. doi: 10.3389/fpsyg.2021.679481
- Oamen, T. E. (2021). Analysis of Factors Influencing Pharmaceutical Sales Workforce Engagement in Pharmaceutical Marketing in Nigeria: A Structural Equation Modeling Approach. *Global Journal of Pure & Applied Sciences*, 27(4), 405-410.  
<https://doi.org/10.4314/gjpas.v27i4.7> (2021).
- Organización para la Cooperación y Desarrollo Económico, OCDE (2016). Habilidades para el progreso social: El poder de las habilidades sociales y emocionales.  
<https://www.oecd.org/publications/habilidades-para-el-progreso-social-9789264253292-es.htm>
- Pérez-Bonaventura, M., Fortó-Areny, J. y Mariño-Mesías, R. M. (2023). Las Redes Sociales de Universidades Públicas de Andorra, España y Francia: Estudio y análisis de las redes sociales de universidades públicas de Andorra, España y Francia. *Visual Review*, 14(2), 1-13. <https://doi.org/10.37467/revvisual.v10.4609>
- Ponga, J. (2018). Las nuevas habilidades que el entorno digital exige. Deloitte México.  
<https://www2.deloitte.com/mx/es/pages/dnoticias/articulos/habilidades-interpersonales.html>
- Rakotoasimbola, E. y Blili, S. (2019). Measures of fit impacts: Application to the causal model of consumer involvement. *International Journal of Market Research*, 61(1), 77-92. <https://doi.org/10.1177/1470785318796950>
- Rochelle, L., Campêlo, E., Pinheiro, C. A., de Carvalho, M. C., Batista, L. K. y Fernández, R. (2021) Calidad de vida en el trabajo y salud pública: Estructura dimensional de una escala. *Enfermería Global*, 20(2), 453-491.  
<https://doi.org/10.6018/eglobal.436441>
- Rogers P. (2022). Best Practices for Your Exploratory Factor Analysis: A Factor Tutorial. *RAC: Revista de Administração Contemporânea*; 26(6),1-17. doi:10.1590/1982-7849rac2022210085

- Sanandres Campis, E. (2023). Aplicación del Análisis de Redes Sociales para el estudio de las redes de comunicación en línea: evidencia empírica de Twitter. *EMPIRIA: Revista de Metodología de Ciencias Sociales*, 57, 165-188.  
<https://doi.org/10.5944/empiria.57.2023.36434>
- Schleicher, A. (2020). Social and Emotional Skills Well-being, connectedness and success. OCDE. <http://www.oecd.org/education/cei/social-emotional-skills-study/>
- Secretaría de Educación Pública, SEP (2021). Habilidades Socioemocionales. [construyet.org.mx. http://construyet.sep.gob.mx/habilidades](http://construyet.sep.gob.mx/habilidades)
- Simon, L., y Carah, N. (2017). A snapshot of backchannel talk about health care professionals' communication in a digital world. *Social Media + Society*, 3(4), 2056305117748667
- Software Estadístico SPSS AMOS, IBM, 2024. <https://www.ibm.com/mx-es/spss>
- Suárez-Álvarez, R. y Pastor-Rodríguez, A. (2023). Influencer advertising on TikTok: advert formats and illicit product advertising. A study involving Germany, France, Spain and Italy. *Communication & Society*, 36(3), 175-191.  
<https://libcon.rec.uabc.mx:2281/10.15581/003.36.3.175-191>
- Van Schalkwyk, G. I. (2023). Editorial: Best practices for correlational research in CAPMH. *Child and Adolescent Psychiatry and Mental Health*, 17(1), 1-3.  
<https://doi.org/10.1186/s13034-023-00562-6>
- WE ARE SOCIAL. Informe Digital 2022. <https://wearesocial.com/es/blog/2022/01/digital-report-2022-el-informe-sobre-las-tendencias-digitales-redes-sociales-y-mobil>