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Security, an essential digital skill for users who access the network

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Abstract. **Introduction:** In the digital age, access to the Internet is fundamental to the daily lives of millions of people, but it carries significant risks to privacy and security. **Objective** : To explore the critical importance of security as an essential digital competence for online users. **Methodology:** A literature review and a descriptive study were carried out with 163 professionals attending a conference held in July 2023 at the College of Humanities of Guatemala. **Results** : 80.4% of teachers have felt vulnerable when surfing the Internet and 19.6% have not. **Conclusion:** Online security is crucial for protect the information staff and create a around reliable digital. With the increasing digitalization, understand and practice online safety is essential. Digital competence and the use Technological tools insurance is essential for a society further safe.
Words clue: security, network, competition digital, cybersecurity

La seguridad, competencia digital esencial de los usuarios que ingresan a la red

Resumen. **Introducción:** En la era digital, el acceso a la red es fundamental en la vida diaria de millones de personas, pero conlleva riesgos significativos para la privacidad y la seguridad. **Objetivo**: Explorar la importancia crítica de la seguridad como una competencia digital esencial para los usuarios en línea. **Metodología:** Se realizó una revisión de literatura y un estudio descriptivo con 163 profesionales asistentes a un congreso realizado en julio de 2023 en el Colegio de Humanidades de Guatemala. **Resultados**: El 80.4% de los docentes se han sentido vulnerables al navegar en la red y un 19.6% no. **Conclusión:** La seguridad en línea es crucial para proteger la información personal y crear un entorno digital confiable. Con la digitalización creciente, entender y practicar la seguridad en línea es esencial. La competencia digital y el uso seguro de herramientas tecnológicas son fundamentales para una sociedad más segura.
Palabras clave: seguridad, red, competencia digital, ciberseguridad

Publicações científicas sobre educação a distância e suas características

Resumo. Introdução: Na era digital, o acesso à rede é fundamental na vida diária de milhões de pessoas, mas traz riscos significativos para a privacidade e a segurança. **Objetivo:** Explorar a importância crítica da segurança como uma competência digital essencial para os usuários online. **Metodología:** Foi realizada uma revisão de literatura e um estudo descritivo com 163 profissionais participantes de um congresso realizado em julho de 2023 no Colégio de Humanidades da Guatemala. **Resultados:** 80,4% dos docentes sentiram-se vulneráveis ao navegar na rede e 19,6% não. **Conclusão:** A segurança online é crucial para proteger a informação pessoal e criar um ambiente digital confiável. Com a crescente digitalização, entender e praticar a segurança online é essencial. A competência digital e o uso seguro de ferramentas tecnológicas são fundamentais para uma sociedade mais segura.

Palavras-chave: segurança, web, competência digital, cibersegurança

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Introduction

Online security encompasses a range of practices and measures designed to protect personal information. and sensitive user data. These practices range from the use of strong passwords and the authentication of two factors up to the regular update of software and the ID of online scams. Strong online security skills not only involve adopting these practices, but also understanding the risks associated with phishing, malware, and loss of privacy.

Inside of the context current, the security protects to the users against threats cybernetics, while that the competence digital allows use the technology of manner effective and responsible. Both aspects are crucial in 21st century society, where much of it takes place online.

Consequently, users who go online without a proper understanding of online security are exposed to a range of potential threats, from the loss of personal and financial data to exposure to fraud and cyber attacks, the risks are varied and real. However, when users acquire online security skills, they can take proactive steps to protect themselves and their data. Common cybersecurity threats that can impact lives include: ignorance, naivety and being overly trusting or careless, malware, accounts hacked by phishing, spam or junk email, unsafe homes with wireless networks, data lost, attacks by Wi Fi, between others, as it express (Contreras, 2023; González Fung, 2017; Molina, 2013; Vallejo, 2015, University of Veracruz, n.d.).

The Online security also has an impact in the digital ecosystem. When users practice safe browsing and avoid the spread of false information, they contribute to building a more trustworthy and healthy digital community. It is a key component for building of the trust in the grid, it that to his time promotes the stake active and productive in online. In addition, digital competence refers to the ability to use and understand both technical skills, digital literacy through the use of online assessment, identifying the use of sources reliable, communication and creativity digital by half of the TIC being flexible and aware of the constant technological evolution to which professionals must adapt.

Methodology
For this research, a descriptive study was carried out, thus allowing for a detailed description to be provided. and precise of the freak studied; besides, the temporality HE catalog as cross, since the data collection was carried out at a single time; also, the approach used is mixed, thus counting on qualitative and quantitative data for a better understanding and interpretation of results. In addition to this, the deductive method was used starting from the general to the specific with a population of 163 professionals that attended to the congress done in he month of July 2023 in he School of Humanities of Guatemala

Results
For the information process, descriptive statistics were used, allowing the analysis of data processed through Excel and SPSS version 29 to link demographic data and the cybersecurity variable of users who access the network. For the research process, participants of a pedagogical congress with undergraduate levels and above in July 2023 were considered. Figure 1 below shows the distribution of study subjects by academic level and sex.

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Figure 1

Distribution of teachers subjects of study according to cycle that are studying and average general
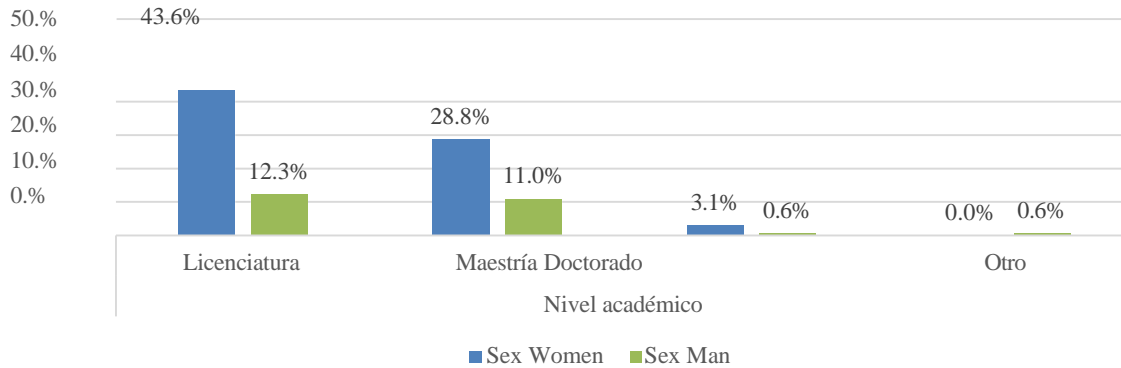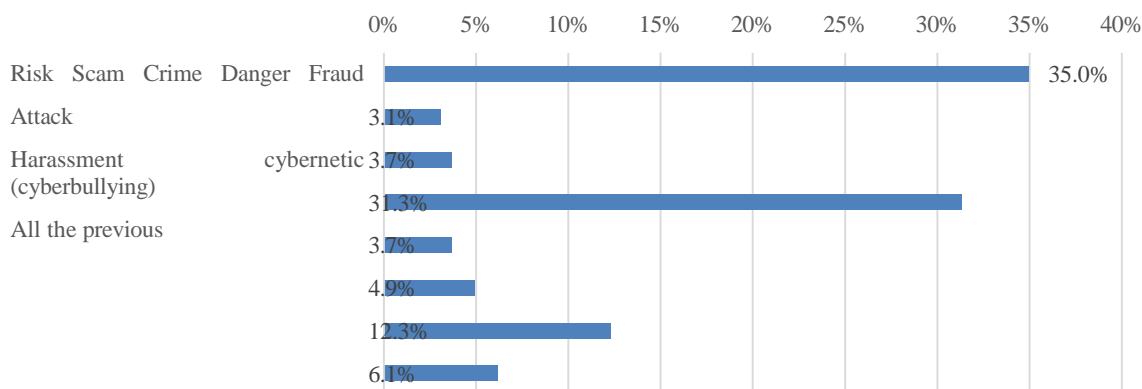

Note. Based in prosecution of data in SPSS.

In Figure 1, the teachers subject to study stand out with 43.6% with a bachelor's degree being the majority part women, he 12.3% of the same level being men; next he 28.8% possess master's degree, highlighting the preparation of teachers in the area in which they work, likewise, more than 50% are included in the generation X, which is characterized by being more selective in the use of social media and mixed experience in technology and awareness of online privacy. Next, Figure 2 analyzes the perception of teachers about online security.

Figure 2
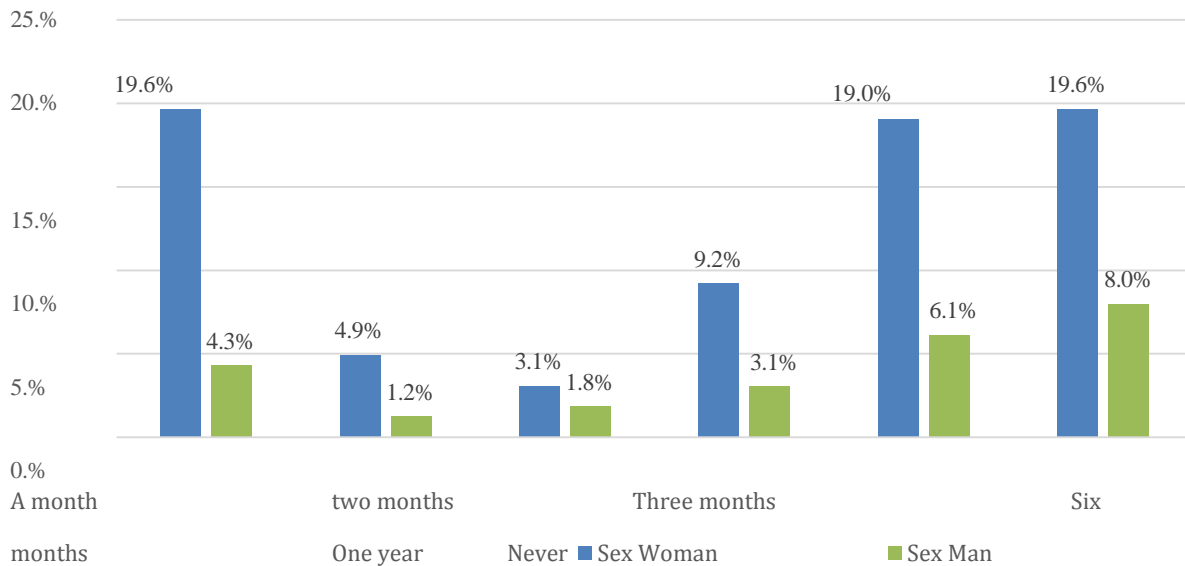*Perception of the expression security in the grid*

Note. Based in prosecution of data in SPSS.

In the figure former, presents that the teachers perceive he term as a 35% as a risk to Through the perception of network security, it can vary depending on their level of experience with technology; secondly, with 31.3% it is perceived as danger and cyberbullying with 12.3% this implies that their role as professionals has to be preventive and aware of the importance of the digitalization. In the figure 3, HE presents the last time that the teachers object of study change their passwords.

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Figure 3

Last time that change password to the mail electronic

Note. Based in prosecution of data in SPSS.

As HE sample in the figure former, the last time that changed the password of his mail the teachers oscillates between a 19.6% that is each month, a 19.6% never and a 19% each year; while that he teacher With 8% not changing their password, 6.1% doing so every year and 4.3% every month, it is important to note that awareness of password changes and online security practices depends on digital education. of the person and No HE stereotypes by genres; but, in this study to the be further of the 54% the teachers of the generation X stands out in the coincidence that are those who never change your password by means of to be forgotten. TO root of this, in the figure 4 HE present the teachers that they have been victims of hacking of at least one account.
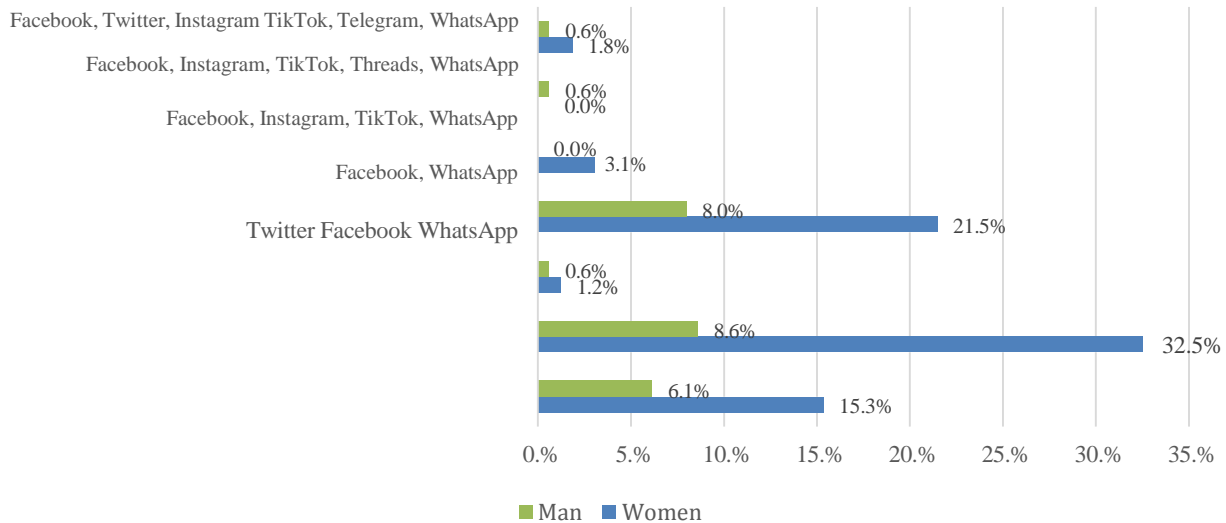
Figure 4

Teachers victim of hacking of a account
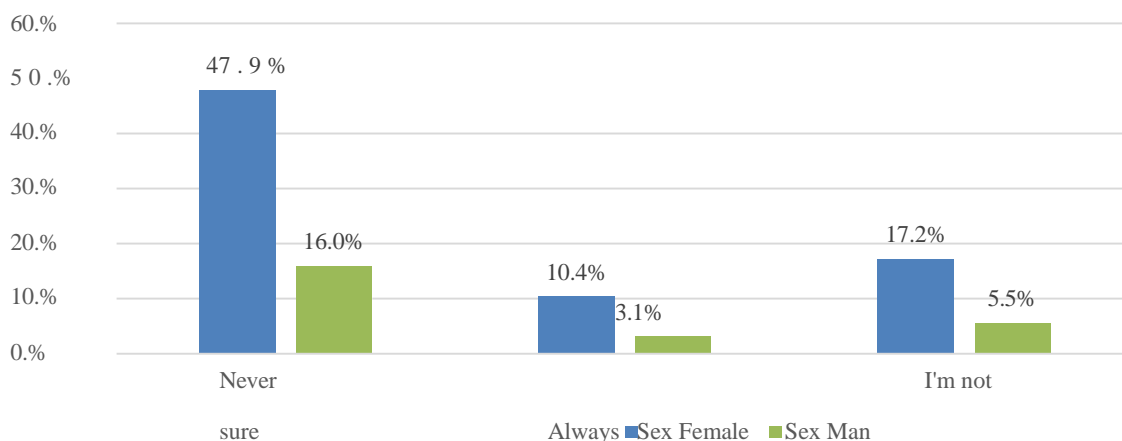
Note. Based in prosecution of data in SPSS.

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In Figure 4, with 47.9% female teachers have never been victims of hacking, in second place, with 16% male teachers have not experienced it; however, 17.2% of women and 5.5% of men have suffered it, as a consequence of misuse of their accounts by using very simple and very high-risk passwords, it is necessary to emphasize that the teachers who have suffered this scourge are from the generation X and millennials, for that that, all depends of that They are so polite digitally and be aware of online threats by always looking for secure connections for such access. Figure 5 below shows the frequency of use of social networks.

Figure 5

Networks social used with frequency

Note. Based in prosecution of data in SPSS.

The figure above shows that the most used networks by teachers is Facebook with 32.5% for women and 8.6% for men; in second place, teachers use both Facebook as WhatsApp represented by he 21.5% for women and a 8% of men; these data They are representative, since the generation X trend is to use this type of social networks. In this sense, Figure 6 shows the followers they have on social networks.
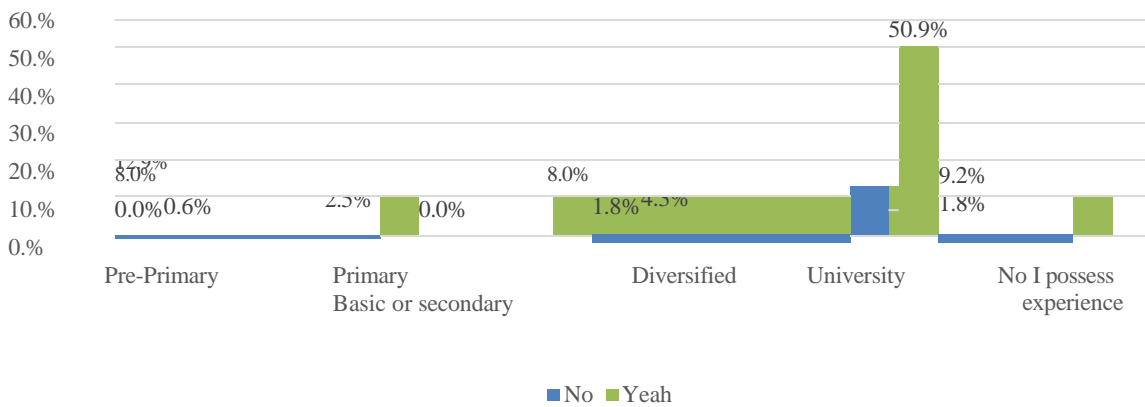
Figure 6

Friends either followers in networks
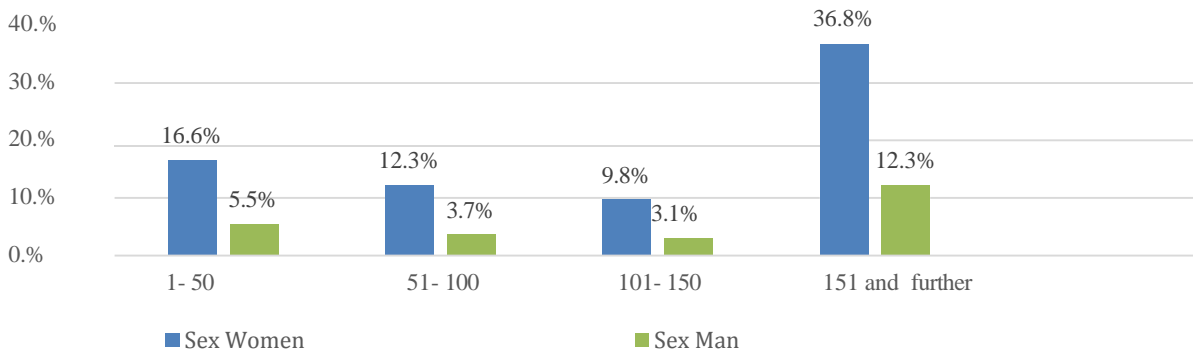
Note. Based in prosecution of data in SPSS.

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The Figure 6 shows that women with a 36.8% have more than 151 friends as well as men with a 12.3%, these data reflect that professionals independently of his age to the work around with 67% in he sector university, HE surround with people that They count with the most of age and are follow them on their social networks; secondly, with 16.6%, the women in the study have around 1 to 50 friends on social networks, as do men with 5.5%. These data show that, as they belong to the X generation, they are more reserved on their social networks. Figure 7 below shows participation in the virtual learning community.

Figure 7

Stake in a community virtual of learning (as organizer either participant) according to he area who serves as a pedagogue.
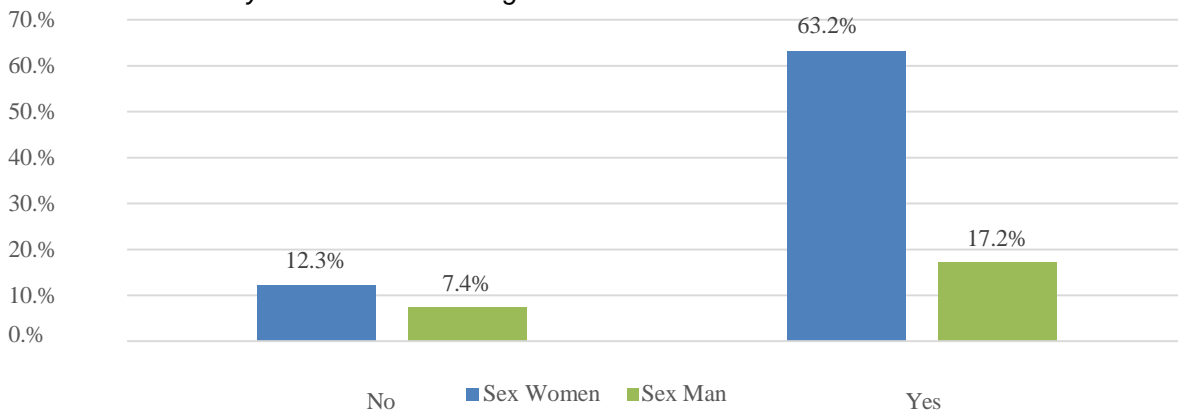

Note. Based in prosecution of data in SPSS.

In the figure 7, HE visualize that he 50.9% of the area that attend is in he area university, this is Understandable since technological updates are constantly changing and to keep up with technological competencies it is necessary to update oneself with massive online courses and groups in the area in which HE is to end, with he aim of propitiate and share knowledge. In second place, 9.2% that to despite that No possesses experience in he field labor of the teaching, this in virtual groups of learning by specific topics of personal interest. Figure 8 below shows the perception of vulnerability when browsing the Internet.

Figure 8

Perceive vulnerability to the browse in the grid

Note. Based in prosecution of data in SPSS.

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The figure above shows that 63.2% of women perceive vulnerability when surfing the Internet. to the equal that the men with a 17.2% this implies that he professional use passwords weak, It uses open ports when using free internet and is not protected; as well as viruses and all kinds of malware when entering pages without a secure connection, the constant fake emails disguising themselves as banks or other institutions wanting to scam users and obtain confidential information. If this situation continues to occur, it can be counterproductive for the professional, so they must be careful and use secure pages for their navigation.

Discussion

In an increasingly interconnected world, online security has become a digital competency essential for all the users in the grid. Grasp and apply practices safe in line, No not only protects personal information and sensitive data, but also contributes to the creation of a safer and more trustworthy digital environment. Those who master this competence not only protect themselves, but also foster a more conscious and secure digital culture, not only at a general level but also in health system contexts. (Caján Villanueva, M., Calderón Torres, NA, & Administrator, 2021)

The fast evolution of the technology demands a constant adaptation and update of knowledge. Teachers, in particular, perform a paper crucial in this task, already that his domain of the digital skills No only influences in his own security, but also in the of their students. Is fundamental Educators stay up to date with online safety best practices and tools, integrating them into their teaching to prepare students for a safe digital world.

In addition to the above, digital security education must be comprehensive and continuous, starting from basic educational levels and extending throughout the professional life of individuals. Training and awareness about the importance of online security must be part of a comprehensive approach. educational global that involve to institutions, governments and companies. Only to through of a joint effort can be achieved safer digital environment and resilient, capable of meet the challenges of a world in constant change and evolution.

Conclusions

Ultimately, online safety is a fundamental pillar for successful online participation and sustainable. For protect our security and privacy in line, is crucial adopt measures preventive measures and safe practices. For example, it is advisable not to share the passwords for our online accounts with family or friends and keep them in a safe place. This caution It is vital, especially in the event that personal relationships change.

Additionally, password memorization should not be activated on shared or public computers, as this increases the risk of our credentials being accessible to unauthorized third parties. Taking our privacy seriously involves not sharing or allowing access to our information. to less that sea absolutely necessary, minimizing So he risk of that fall in undue hands .

A strategy effective for minimize the threats and safeguard the data in line, combines he use security products, such as antivirus and password managers, with common sense and ongoing education in secure practices. Awareness and ongoing security training are essential to keep protected in he around technological in constant evolution. So, No only us We not only protect ourselves, but we also contribute to creating a safer and more trustworthy digital environment for everyone.

References

Contreras, R. (October 4, 2023). *The 10 largest cyberattacks of the decade.* Digital Iberia 360. https://www.computing.es/seguridad/los-10-ciberataques-mas-grandes-de-la-decada/
González Fung, C. (2017). A complete overview of information security in the digital world. [Third Congress international of engineering and computing, challenges and perspectives of the world digital]. PUCP. https://repositorio.pucp.edu.pe/index/handle/123456789/71344
Molina, J. (2013). *Strategic vision of computer security in the telecommunications sector.* [First National IT

===

Security Forum: the impact of security on companies' strategy]. of operations TIC. Emtelco S. TO. https://sistemas.uniandes.edu.co/en/foros-isis/temas-   isis-forums/digital-contents/forum-8?view=category&id=71

University Veracruz native. (sf). The 7 threats in cybersecurity that they can affect his life .Noti_infosegura. https://www.uv.mx/infosegura/general/noti_ciberseguro/

Vallejo, TO. [TEDx [Talks]. (29 of December of 2015). A approach to the cybersecurity. [Video].Youtube. https://www.youtube.com/watch?v=xQQdLKe9LXQ

Villanueva, MC, & Torres, NAC (2021). Metadata, health system and pension regimes of Peruvian artists in the context of Covid-19: Metadata, health system and pension regimes of Peruvian artists. GESTIONES,   1(1),   1-9.   Recovered   to   from https://gestiones.pe/index.php/revista/article/view/GESTIONES

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