

Attitude Toward of Information at Public University in Central Mexico

Cruz Garcia Lirios

Universidad Autónoma de la Ciudad de México, Universidad Anahuac del Sur

***Corresponding Author:** Cruz Garcia Lirios, Universidad Autónoma de la Ciudad de México, Universidad Anahuac del Sur, México.

Received Date: Dec 02, 2023; **Accepted Date:** Dec 12, 2023; **Published Date:** Dec 21, 2023

Citation: Cruz Garcia Lirios, Cruz Garcia Lirios, (2023), Attitude toward of information at public university in central Mexico, *Clinical Medical Reviews and Reports*, 5(8); DOI:10.31579/2690-8794/188

Copyright: © 2023, Cruz García Lirios. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract

Purpose of the study: The Technology Acceptance Model (TAM) explains the impact of the pandemic on the use of devices exposed to COVID-19 microparticles as a means of contagion, the TAM predicts the acceptance or rejection of the Technologies of Information and Communication (TIC's).

Methodology: The Technology Acceptance Scale was used to carry out a correlational, cross-sectional and psychometric study on the rejection or acceptance of technology in the COVID-19 era.

Main findings: Four factors related to the acceptance of technology in the pandemic were found: 1) selectivity, 2) compatibility, 3) computability and 4) accessibility that explained 67% of the variance.

Applications: In information sciences and organizational studies, the TAM is a model that measures productivity and competitiveness mediated by ICTs.

Novelty/originality: The four dimensions explain the reduction of the risk of contagion in response to the work culture and biosafety standards in organizations that use technology

Keywords: technology acceptance; covid; factorial model; tam; sars cov-2

Introduction

The intensive use of technologies, devices and electronic networks not only own differences between users and non - users, but also even among those who use one or the other same technology that eventually perfects and involves continuous learning abilities and knowledge processing and dissemination of information.

As part of the information society, the intensive use of technology and electronic devices or mechanics has exacerbated the differences between digital networks and users who have access including, but not link their work or academic activities using the Internet (Sanchez et al., 2020). The digital divide between generations and even between users makes it necessary to reconcile interests, needs and expectations, as well as skills and knowledge according to the opportunities and capacities, demands and local resources available to the demands of the international market. The system in which these differences are settled is governance and the instrument by which the asymmetries and similarities is known as public agenda are weighted.

Thus, if a town has an agenda focused on networks, technologies and dispositive electronic as the Republic of Estonia, then hopefully there is a small gap between the generations, but in the opposite case of the Republic of Ethiopia where their digital agenda is almost nonexistent, availability,

access and connectivity are almost nil, then it is possible to expect a digital divide between their generations and even among the few Internet users (Aguayo, Lirios & Najera, 2021).

The Organization for Economic Cooperation and Development (OECD) in its report runs to 2020 spending notices a decrease in the rate of population growth from 1950 and projects a downward trend until 2050. Korea, Brazil and India are the countries with the highest growth trend, Mexico ranks third place and France, Belgium and Sweden are the countries with the lowest growth rate (Aguayo, Lirios & Najera, 2020). Regarding the expected population by 2050, India will have about 395 million 19 years, Mexico will occupy the sixth place with approximately 28 million and Iceland will be positioned on the last place with 85 thousand inhabitants. The OECD notes that these figures reveal the expectations of economic, technological and commercial growth that allow predicting the close relationship between the trend of population growth and electronic consumption. To the extent that the population increases, the expectations of the use of information and communication technologies will be more oriented to the purchase and sale of products and the contracting of services on the Internet.

For these countries, growth without preceding the use of related consumer electronic technologies is expected. However, the working age population will use and consume a greater extent Internet both in its form to academic, training, job performance and consumer electronics. Regarding the productive age, India will continue with the largest labor force with about 998 million, Mexico will continue in sixth place with 73 million and Iceland will occupy the last place with around 215 thousand workers.

However, a consequence of the dynamics of population growth is the old age that in the case of the mentioned countries will have the same tendency (García & Bustos, 2021). In India, there will be around 222 million elderly people, in Mexico there will be 29 million elderly people and Iceland will have 108 thousand people over 65 years old.

The overall population trend can be explained prospectively from the current trend and the local foundation cr. In the case of Mexico, localities with more than 2500 inhabitants have a significant increase in relation to the towns with more than 15,000 inhabitants. While small towns increase their growth rate, large towns tend to decrease (Najera et al., 2020). These data, combined with the educational trend, explain the use of the internet for commercial rather than educational or labor purposes. In Mexico, the coverage or public decreases and supply increases private institutions, mainly in urban with over one million inhabitants, expanding educational coverage and localities, the highest level recorded a spurious growth. However, access to the internet, despite its high cost compared to the rates of other member countries of the OECD, is significant in medium and small towns.

The data put forth show growth trends in population, education and internet. These figures support the hypothesis about the formation of attitudes towards technological Information and Communication, mainly Internet service specifically e-commerce defined as the exchange of goods and services through protocols of electronic money transfer (Guillen et al., 2020). However, because most Internet users are under the age of 19, electronic consumption seems to explain the acceptance and use of the internet in exclusive websites for social networks. In this sense the psychological studies of Internet use two theoretical models have been used to demonstrate the hypothesis around socio-demographics and attitudinal determinants to the Internet. This is the Technology Acceptance Model (TAM) and the Technology to Work Adjustment Model (TTFM).

If the OECD forecast on the trend of population growth, educational offer and internet access for Mexico is constant until 2050, socio-demographic variables indirectly predict the use of a technology through intentions, attitudes and perceptions (Lirios, 2021). The OECD argues that the educational efficiency of the economically active population between 25 and 65 years of its member countries is greater in the United States and less in Mexico and Turkey (Lirios et al., 2020). However, considering ranges from 25 to 34 is the leading country Korea, Mexico and Turkey being the latest. In the range of 35 to 44 years Korea remains in first place tied with the Czech Republic. With respect to the range of 45 to 54 years EU recovers the first site. The range of 55 to 64 years to US and Canada recorded the highest values. The Czech Republic which a higher percentage of educated men and Portugal occupies the last place. In the range of 25 to 34 years retrieves the first site Korea, Mexico and Portugal are located in places. 35 to 44 years, Czech and Slovakia are leaders and Turkey ranks last. 45 to 54 registers EU and Turkey increased efficiency gets lower efficiency. 55 to 64 EU and Turkey occupy the first and last place in the list.

Around the efficiency of Internet use, sex and age are considered external factors affecting through perceptions, attitudes, and intentions indirectly on eating and consumer electronics (Orozco et al., 2020). Psychological studies

of Internet have developed models to predict structural efficiency around the use of the Internet from the variables s or - demographic.

The OECD in its report for the year 2020 observed an increasing population trend from 1950 until 2049. In 1950, India had the highest growth with 15.67 and Ireland was the country with lower growth with 4.90 percent (García-Lirios, 2021). In the year 2050, South Africa will be the country with the highest population growth percentage reaching 6.06 and Japan will occupy the last place with 1.24 percent. In the case of Mexico will have a foundation and 2.53 percent.

If we relate the trend of population growth with spending Des Research and experimental (GIDE) in the period 1998 to 2007 it corresponds to the lower GIDE Mexico in relation to most countries of the OECD. In 2007 the United A two of America (USA) invested the most in GIDE with 368.799 million USD (Rincon et al., 2022). Even historically, the US has invested the most. However, Japan and Korea are superior in their inventiveness coefficient. The National Council of Science and Technology (CONACYT) of Mexico, in its 2010 report notes a growing trend in the period from 1998 to 2007 in Korea, Japan and the United States, countries with the highest population trend. In global terms, the global coefficient has increased from 6.57 percent in 1998 to 5.82 in 2007, when Japan reached 26.10 and in the case of Mexico, investment in GIDE went from 2.926 in 1998 to 5.580 in 2007. That took the last place with 0.5 for the same thing years when the coefficient is measured in the countries of the OECD.

The National Population Commission (CONAPO) in its report for the 2020 s the Economically Active Population (PEA) represents 58.45 percent (48 919,801) of the total population is around 112 million (Sandoval et al., 2021). The male population represents 76.75 percent (30, 608,123) and women 41.79 percent (18, 311,678) of the PEA. Around 13.79 percent (6, 261,777) work in the primary sector, 24.09 percent (11, 168,690) in the secondary sector and 61.78 percent (28, 639,914) in the tertiary sector. Only 6.05 percent (3,021,434) work less than 15 hours, between 15 and 35 hours work 19.35 percent (8, 910,795), between 35 and 48 hours work 43.12 percent (19,986,547) and more than 48 hours 27.55 percent 12,769,807) of the PEA. These demographic data show an X-ray of the EAP without considering its relationship with technology in general and the Internet in particular. In each of the sector's technology increases the productivity of the organization they work for employees and thereby increases job performance (Lirios et al., 2021). However, Information and Communication Technologies (ICT), mainly the internet, are related to the tertiary sector. In this sense, psychological studies of ICT acceptance have established itself as determinants of Internet use socio-demographic variables and intentions of use. Around the explanation of the acceptance and use of internet psychological theories of Reasoned Action (TAR), the Planned Behavior (TCP) and the acceptance of Technology (TAT) they have been cited by the state of the art.

The objective of this research was to establish the reliability and validity of an instrument to measure the intention of finding information considering the selection processing and exchange of academic content available online. For this purpose, the literature was reviewed and based on the state of knowledge scale intention information search for academic purposes was built.

Methods:

The present work followed the guidelines of the PRISMA method for the review of the literature and the selection of instruments, as well as the empirical contrasting process of the TAM.

A cross-sectional study conducted quantitative court. A non-random selection of 3 students held a public university of Mexico, criterion-exclusion

was to have been inscribed in the computer lab, belonging to a social network and search information for the preparation of tasks, jobs, internships, exhibitions, dynamic, theses or research reports. 160 women (M = 19.5 years and SD = 3.15 years) and 140 men (M = 22.5 years and SD = 4.26 years). The Prisma method allowed the selection of the Technology Acceptance Scale against the risks of COVID-19. The instrument was designed based on the TAM and the Innovation Diffusion Model (IDM). Items were selected to assess their comprehension using the Delphi method. Then, through focus groups, the homogenization of the reagents was achieved. The instrument from judges according to Delphi analysis technique constructed do and establishment of consensus in each of the categories weighted the difference between time average time and self -reported use internet was requested corresponding to the application of the instrument in the classroom (Sanchez et al., 2022). Once explained to students that the study would not affect either positively or negatively their partial or final, we proceeded to deliver the survey warning having a maximum of 20 minutes to answer. Whenever there was a lack of reason, or, the same response is repeated for each assertion, it was eliminated the case of statistical analysis. The data were captured in the package and statistic for Social Sciences (SPSS) and software called analysis of moments and s structures (AMOS) in versions 10 and 6.0, respectively.

Analyzes multivariable were performed prior distribution requirement's reliability and validity for which parameters were used kurtosis, alpha and weight factorial. Once established psychometric properties, we proceeded to estimate the correlation between each of the eight factors regarding them themselves by stats (Carreon et al., 2020). Dependency ratios were calculated with the parameter bet on between the factor and indicators, as well as the use of statistical epsilon, for relations between the manifest errors of estimation variables. Finally, the contrast of the structural model was performed with the parameter's chi square and goodness of fit residual.

Results

The values of kurtosis close to unity show a trend of normal distribution, although the averages of the answers to the items indicate that so shows considers it very likely the relationship between information seeking and life s every day and activities academic (see Table 1). Kurtosis generally = 2.47; Bootstrap = 0.000; KMO = 0.601; X² = 12.35 (24gl) p = 0, 000; Selectivity (21 % variance explanatory text each); Compatibility (18 % of the total explained variance); Computability (15 % of total explained variance); Accessibility (13% total explained variance).

Table 1. Centrality measures per variable

Variable	Network			
	Betweenness	Closeness	Strength	Expected influence
Sex	-0.327	2.125	2.016	-1.964
Age	-0.327	-1.328	0.364	-0.319
Income	3.318	2.194	2.025	-2.097
Usefulness	-0.327	-0.194	0.818	-0.808
Ease	-0.327	-0.311	-0.580	0.576
Risk	-0.275	-0.311	-0.580	0.576
Trust	-0.275	-0.311	-0.580	0.576
SelfEfficacy	-0.275	-0.311	-0.580	0.576
Beliefs	-0.298	-0.311	-0.580	0.576
Attitude	-0.275	-0.311	-0.580	0.576
Intention	-0.298	-0.311	-0.580	0.576
Acceptance	-0.288	-0.311	-0.580	0.576
Innovation	-0.023	-0.311	-0.580	0.576

Regarding the validity of constructs, the factor weights of the items in each of the eight specified factors indicate that there are sufficient correlations to support the eight cases of intentional multidimensional information search network (see Table 2). Thus, the anxiety about the speed of information search, the backup file or the completeness of these was the Shimmer

factor to the intended use of internet for academic purposes. Setting parameters and residual [X² = 24.36 (16gl) p = 0.000; GFI = ,990; RMR = 0.000] suggested the acceptance of the null hypothesis, even when the chi square was significative and would rejection of the hypothesis in question.

Table 2. Clustering measures per variable

Variable	Network			
	Barrat	Onnela	WS	Zhang
Acceptance	0.640	0.637	0.641	0.351
Age	-1.413	-1.396	-1.441	1.656
Attitude	0.640	0.637	0.641	0.351
Beliefs	0.640	0.637	0.641	0.351
Ease	0.640	0.637	0.641	0.351
Income	-1.458	-1.481	-1.441	-2.020

Table 2. Clustering measures per variable

Network				
Variable	Barrat	Onnela	WS	Zhang
Innovation	0.640	0.637	0.641	0.351
Intention	0.640	0.637	0.641	0.351
Risk	0.640	0.637	0.641	0.351
SelfEficacy	0.640	0.637	0.641	0.351
Sex	-1.442	-1.171	-1.441	-1.130
Trust	0.640	0.637	0.641	0.351
Usefulness	-1.452	-1.684	-1.441	-1.669

However, the values of adjustment and residual are preponderant in these cases and therefore are discussed below implications of accepting the assumption that information seekers are characterized by a psychological process, we have called intentional network (see Table 3). Such

psychological process explains the rational, deliberate, planned and decisions around the development of jobs, tasks, exhibitions or thesis from the selection, compatibility, computation, access, accumulation, and addition information they have available from your electronic devices.

Table 3. Weights matrix

Network													
Variable	Sex	Age	Income	Usefulness	Ease	Risk	Trust	SelfEficacy	Beliefs	Attitude	Intention	Acceptance	Innovation
Sex	0.000	0.402	-0.372	0.276	-4.909	-4.909	-4.909	-4.909	-4.909	-4.909	-4.909	-4.909	-4.909
Age	0.402	0.000	-0.310	-0.272	-2.863	-2.863	-2.863	-2.863	-2.863	-2.863	-2.863	-2.863	-2.863
Income	-0.372	-0.310	0.000	-0.034	-4.957	-4.957	-4.957	-4.957	-4.957	-4.957	-4.957	-4.957	-4.957
Usefulness	0.276	-0.272	-0.034	0.000	-3.473	-3.473	-3.473	-3.473	-3.473	-3.473	-3.473	-3.473	-3.473
Ease	-4.909	-2.863	-4.957	-3.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Risk	-4.909	-2.863	-4.957	-3.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Trust	-4.909	-2.863	-4.957	-3.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
SelfEficacy	-4.909	-2.863	-4.957	-3.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Beliefs	-4.909	-2.863	-4.957	-3.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Attitude	-4.909	-2.863	-4.957	-3.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Intention	-4.909	-2.863	-4.957	-3.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Acceptance	-4.909	-2.863	-4.957	-3.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Innovation	-4.909	-2.863	-4.957	-3.473	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.0

Discussion

The contribution of this study to the literature reviewed is the establishment of reliability and validity of an instrument that measures intentions search for information networks, technologies and electronic devices connected to the Internet.

But exploratory non - probabilistic design and selection of sample limit results. In that sense, the contrast of the structural model of relations between the reflective dependence is recommended construct the intention of seeking information and dimensions or factors found.

Regarding governance networks, technologies and electronic devices it is necessary to further study the differences or digital gaps between contexts with high inclusion, accessing and processing digital information regarding entities with no connectivity and portability (Carreon et al., 2020).

Regarding the instruments used in the literature scale intentional network and dimensions that literature reports as priority, although its internal consistency and validity can be improved if a study context is explored in order of the meanings of concepts in reagents instrument (Morales, Sanchez & Lirios, 2022).

Regarding confirmatory factor analysis of the dimensions found is necessary to consider including the dimensions explained more than 20% of the total

variance and that this implies internal consistency and construct validity necessary to perform the contrasting of hypothetical factors study in other contexts (Aguayo et al., 2022).

The objective of this work was to establish the dimensions of the technology acceptance model. The findings show the prevalence of eight components, among which anxiety and addiction stand out as main factors. The sample surveyed seems to reflect more anxiety and addiction to technology in times of pandemic. The implications for risk communication suggest a trust-centered model of technology acceptance, since as COVID-19 intensifies and forces people to confine and distance themselves, anxiety and addiction increase.

The findings are preliminary, but innovative in light of the literature consulted. 1) The TAM usually includes perceptual variables of utility and ease of use of technology, but the model found suggests variables that explain the health and technological reasons for exposure to pandemic risk; 2) The structure of the TAM has been designed to predict the acceptance of technology, but the present study was designed to understand the reasons for exposure to the pandemic through technology; 3) The TAM model has been empirically tested with employees of organizations, but the present work

used a sample of students where the acceptance of technology in exposure to risk of contagion is allowed or observed.

Conclusion

The present work is limited to an intentional sample of students, although the validity studies of the TAM suggest samples of workers in organizations that use technology. In the case of the confinement of people, studies indicate that the TAM reduces its predictive power due to the emergence of stigma towards the authorities, but in the present work, confidence in technology emerged. In the case of the structural model, negative relationships between indicators and constructs are observed (see red lines), but mostly positive relationships are observed (see green lines).

References

- AGUAYO, J. B., LIRIOS, C. G., & NÁJERA, M. J. (2020). Percepción de seguridad frente a la Covid-19. *Revista De Investigación Académica Sin Frontera: División De Ciencias Económicas Y Sociales*, (32), 1-26.
- AGUAYO, J. B., LIRIOS, C. G., & NÁJERA, M. J. (2021). Validity of a habitus model of coffee entrepreneurship. *SUMMA. Revista disciplinaria en ciencias económicas y sociales*, 3(1), 1-21.
- AGUAYO, J. M. B., VALDES, J. H., CORDOBA, V. H. M., NÁJERA, M. J., VÁZQUEZ, F. R. S., et al. (2022). Digital activism in students of a university in central Mexico in the COVID-19 era. *Advances in Mobile Learning Educational Research*, 2(1), 297-307.
- CARREÓN-GUILLÉN, J., BUSTOS-AGUAYO, J. M., BERMÚDEZ-RUÍZ, G., ESPINOZA-MORALES, F., et al. (2020). Actitudes hacia la pandemia ocasionada por el coronavirus SARS-COV-2 y la COVID-19. *Invurnus*, 12-16.
- GARCÍA-LIRIOS, C. (2021). Metaanálisis de la seguridad percibida en el transporte público en la era Covid-19. *Eco Matemático*, 12(1), 107-116.
- GARCÍA LIRIOS, C., & BUSTOS-AGUAYO, J. M. (2021). Diseño y evaluación de un instrumento para medir el uso de internet en la era COVID-19 (Design and Evaluation of an Instrument to Measure Internet Use During the COVID-19 Era). *Revista CEA*, 7(14).
- GUILLÉN, J. C., AGUAYO, J. B., SÁNCHEZ, A. S., MUÑOZ, E. M., & LIRIOS, C. G. (2020). La estructura del estrés laboral. *Revista de Investigación Académica Sin Frontera: División de Ciencias Económicas y Sociales*; (32), 1-23.
- LIRIOS, C. G. (2021). Percepciones de riesgo laborales en la era Post Covid-19. *Know and Share Psychology*.
- LIRIOS, C. G., GUILLÉN, J. C., AGUAYO, J. M. B., & VALDÉS, J. H. (2020). Percepción del emprendimiento caficultor en la región Huasteca, centro de México. *Revista Activos*; 18(1), 235-266.
- LIRIOS, C. G., SÁNCHEZ, J. A. G., GRACIA, T. J. H., GUILLÉN, J. C., et al. (2021). Contraste de un modelo de los determinantes de la estancia turística en la era covid-19: implicaciones para la bioseguridad. *Turismo y patrimonio*; (16), 11-20.
- MORALES, F. E., SÁNCHEZ, A. S., & LIRIOS, C. G. (2022). Reputación corporativa en una universidad pública formadora de trabajadores sociales de la salud pública. *Revista GEON: Gestión-Organización-Negocios*; 9(1), 1-11.
- NÁJERA, M. J., AGUAYO, J. M. B., GUILLÉN, J. C., & LIRIOS, C. G. (2020). La percepción de riesgo en estudiantes universitarios ante la propagación del coronavirus SARS-COV-2 y la enfermedad COVID-19. *Revista de Psicología de la Universidad Autónoma del Estado de México*;9(17), 94-107.
- OROZCO, A. V., ESPINOZA, L. G., HERNÁNDEZ, M. Z., & LIRIOS, C. G. (2020). Specification of a local entrepreneurship model. *Revista de Investigación Académica Sin Frontera: División de Ciencias Económicas y Sociales*; (33), 1-16.
- RINCÓN, O. C., GONZÁLEZ, M. D. R. M., MOJICA, E. B., GUILLÉN, J. C., et al. (2022). Estrategia de gobernanza para consensuar las expectativas de estudiantes de una universidad pública para regresar a clases interrumpidas por la pandemia. *Revista de la facultad de Derecho y Ciencias Políticas*;52(136), 319-338.
- SÁNCHEZ-SÁNCHEZ, A., VALÉS-AMBROSIO, O., GARCÍA-LIRIOS, C., & AMEMIYA-RAMIREZ, M. (2020). Confiabilidad y validez de un instrumento que mide la gestión del conocimiento. *Espacios en blanco. Serie indagaciones*; 30(1), 1-10.
- SÁNCHEZ-SÁNCHEZ, A., ESPINOZA-MORALES, F., QUIROZ-CAMPAS, C. Y., SANDOVAL-VÁZQUEZ, F. R., et al. (2022). Metaanálisis de las percepciones de riesgos laborales en la era COVID-19.
- SANDOVAL-VÁZQUEZ, F. R., AGUAYO, J. M. B., & GARCÍA-LIRIOS, C. (2021). Desarrollo local en la era post covid-19. *Ciencia Huasteca boletín científico de la escuela superior de Huejutla*, 9(18), 17-22.



This work is licensed under Creative Commons Attribution 4.0 License

To Submit Your Article Click Here:

Submit Manuscript

DOI:10.31579/2690-8794/188

Ready to submit your research? Choose Auctores and benefit from:

- fast, convenient online submission
- rigorous peer review by experienced research in your field
- rapid publication on acceptance
- authors retain copyrights
- unique DOI for all articles
- immediate, unrestricted online access

At Auctores, research is always in progress.

Learn more <https://auctoresonline.org/journals/clinical-medical-reviews-and-reports>