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MEDIATOR FACTORIAL MODEL OF SOCIAL ENTREPRENEURSHIP IN THE COVID-19 ERA

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ABSTRACT

The optimization of resources as an entrepreneurship initiator has been observed as an emerging phenomenon in the pandemic, although its determinants have not been established. Design. This paper aims to establish the relationships between the determinants of resource optimization. An exploratory, cross-sectional and correlational study was carried out with a sample of 186 students from a public university in central Mexico, considering their participation in the system of professional practices and social service. The perceived usefulness of the technology was found to be a determinant of the optimization of resources. Entrepreneurship in the health crisis depends on trust in technology. Entrepreneurship policies focused on microfinancing will move towards technology financing.

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INTRODUCTION

An Internet connection from root servers, the United States, Japan, Holland and Sweden are the main nodes (Garia *et al.*, 2022). Japan is the nation with the highest connection speed (61.0 Mbps), Sweden ranks fourth (18.2 Mbps), Holland is sixth (8.8 Mbps) and the United States occupies tenth place (4.8 Mbps) (Carreon *et al.*, 2019). The economic, technological, and social consequences of globalization are described to propose the Theory of Mobile Consumption that explains the consumption of products and services through mobile telephony (Bustos *et al.*, 2022).

The Technology Acceptance Model has shown that the perception of utility is the determinant of the use of technology (Carreón *et al.*, 2019). It has also established the influence of socio-digital networks on the adoption of technology (Bustos *et al.*, 2021). In the academic field, perceived usefulness has been a determinant of the use

of the virtual classroom, electronic devices and socio-digital networks (Carreon *et al.*, 2015). Confidence towards technology has predicted the use of platforms, software or applications (Limon *et al.*, 2019). Even the risks associated with identity theft are determined by the security perceptions attributed to the technology (Quiroz *et al.*, 2020). In other words, the technology is assumed to be safe and beneficial when exposed to risks such as extortion, ridicule or harassment.

Precisely, in the following section, the Mobile Consumption Theory (TCM) is explained, which explains the determinants of consumption through a mobile phone (Carreon *et al.*, 2019). The Theory of Mobile Consumption states that individuals carry out their purchases through a mobile phone based on their utilitarian perceptions and purchase decisions (Garcia *et al.*, 2022). The TCM maintains that people consume basic products and services through the consumption of

secondary products (Carreon *et al.*, 2019). Individuals when buying a mobile phone or any product and technological information communication service, are exposed to the consumption of basic products and services that are advertised and sold through the technologies. Therefore, the TCM argues that it is the perceptions of utility, innovation and efficiency that determine the consumption of products and services that are advertised and sold through the mobile phone (García *et al.*, 2018). TCM provides the indirect effect of the perception of technological innovation on the consumption of products and services via said mobile technology. It explains the relationship between ICTs with individuals saturated with multiple activities, people who buy and people who work as supervisors or vendors (García *et al.*, 2019). The TCM predicts the use of the mobile Internet from a cognitive process that begins perceptually and ends behaviorally (García *et al.*, 2016). From the TCM, the study detailed below was carried out.

The perception of utility is the central axis of the knowledge management agenda because it translates statistical data into meanings of commitment, entrepreneurship, and innovation, as well as generates new protocols for information processing whenever the objectives and goals are subject to the climate of tasks, supports and relationships between stakeholders (Hernandez *et al.*, 2019). The TCM raises three explanations for the consumption of products and services through mobile phones.

This is how the objective of the present work was to specify a model for the study of the perception of the utility, considering the dimensions that literature contributes concerning the acceptance of technology, the propensity to information and the motivation for achievement.

The objective of this work was to specify a model for the study of electronic consumption. An exploratory, cross-sectional, and psychometric study was conducted with a selection of Internet users, considering their time of use. An associative perceptual structure was found between the usefulness of the technology and the effectiveness of the respondent, although the research design limited the results to the research sample, suggesting the extension of the work towards other cybernetic contexts.

Do perceptions of the level of utility and the degree of innovation have an indirect, positive and significant effect on the level of use?

The premises that guide this work suggest that the pandemic impacted economic and social relations, at the same time, activated opportunism, optimization and innovation, indicators of social entrepreneurship (Velázquez *et al.*, 2020). The literature suggests that the main effect of the pandemic is the stigma towards those who are attributed greater contact and exposure to the risk of contagion, disease and death from COVID-19 (García, 2020). As the pandemic intensified and risk communication clarified that transmission is by air, opportunism emerged as a response to the health and economic crisis (Jacinto and Lirios, 2022). Immediately, the scarcity of resources triggered optimization and innovation in the face of the need to undertake new forms of exchange based on distancing and confinement.

METHODS

Study area

It was carried out in the facilities of a public university in central Mexico. The respondents belong to localities with a low human development index and per capita income (García, 2017). The strategic alliances between the university and micro, small and medium-sized companies favour the stagnation of migratory flows to the United States. Consequently, the town is multicultural and entrepreneurial for various reasons associated with the health and economic crisis. In addition, the local government has a microfinancing policy for the promotion of tourism in the communities.

Study population and sampling procedure

The population is made up of the community of migratory flows (García, 2021). From Central America and southeastern Mexico. The sample was selected considering the system of professional practices and social service through the "snowball effect" technique. That is, the participants identified themselves as migrants and survey participants. 186 of which 86 were men ($M=24.3$ $DE = 3.2$ age and $M = 8'967.23$ $DE = 987.34$ monthly income) and 100 women ($M = 23.45$ $DE = 3.4$ age and $M = 7'983.24$ $DE = 345.45$ monthly income)

Data collection method and analytical technique

The surveys were applied at the public university, captured in Excel and processed in JASP version 14.

Model specification

The reviewed studies indicate that opportunism affects the perceived usefulness of technology whenever fatalistic beliefs affect the ease of use (García *et al.*, 2017). In other words, if the surveyed sample assumes that the pandemic is an entrepreneurial opportunity, then they will develop fatalistic beliefs that encourage the use of technology as an information medium (Sanchez *et al.*, 2019). In addition, when the technology is considered useful and easy to use, it will predict the optimization of information resources (Espinoza *et al.*, 2022).

Validity and Reliability Test

Cronbach's alpha, KMO adequacy, and Bartlett's sphericity coefficients of reliability were estimated for

the factorial analysis of principal axes with promax rotation (Carreon *et al.*, 2014).

RESULTS

From the Mobile Consumption Theory, a new model was designed with the variables that met the criteria of reliability (alpha greater than 0.60) and validity (factorial weight greater than 0.300). Multiple linear regression was calculated to establish the determinants of the dependent variables (Opportunism and Fatalism) and the non-linear relationship between independent variables. The scheme shows that the perception factor of academic utility is the main determinant of the level factor of Internet use for academic purposes (Figure 1).

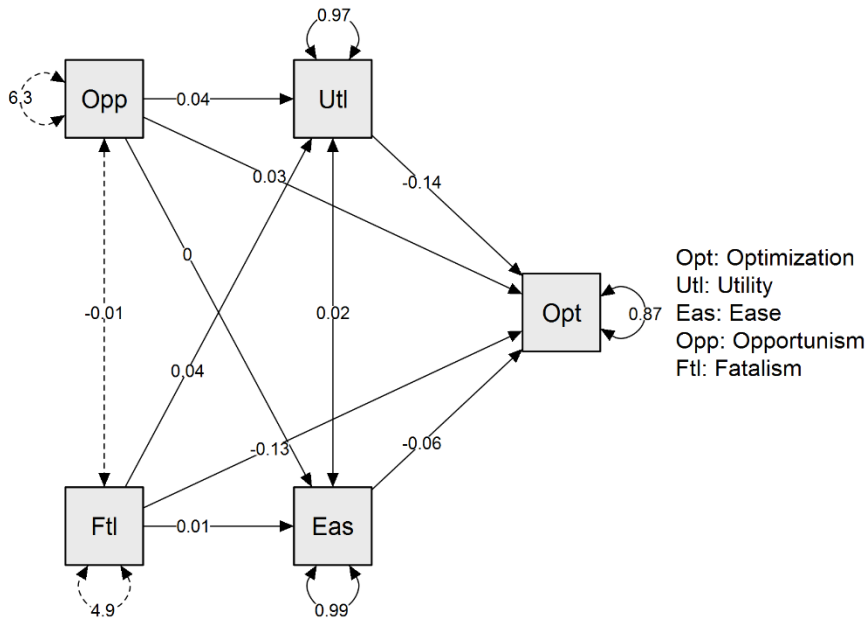


Figure 1. Model of determining trajectories of entrepreneurship.

Source: Elaborated with data study

This finding indicates a modification of the TCM measurement model by proposing a direct, negative, and significant effect ($\beta = -.14$; $p < .05$) of the utility factor on the use for academic purposes. That is, a person looking to buy, for example, a book, could get it if there was a virtual library connected to the mobile phone. Similar reasoning would imply the perception factor of self-efficiency as a determinant of academic mobile use. An individual looking for academic information could find it on his mobile phone. However, the causal relationship lacking the required significance suggests the exclusion of the variable.

The spurious association ($r = .07$; $p < .05$) between independent variables indicates its spurious implication. Finally, the level of mobile Internet use for academic purposes is explained by the two independent variables in 22 percent of their variability ($R^2 = .22$). From the original measurement model, only two variables maintain a causal relationship that selects them for inclusion in another measurement model. These consequences and implications are discussed below.

DISCUSSION

The objective of the present work was to specify a model for the study of the perception of the utility, considering the dimensions reported in the literature, as well as those established in the present work, but its design limited the contributions to the analyzed sample, suggesting the extension of work towards other scenarios and other study samples. Concerning the perception of utility that literature identifies as concomitant to the perceived ease of use (Martínez *et al.*, 2019). Since the perception of efficacy is a determining factor of optimization when associated with the perception of control, the perception of usefulness would be mediated by the perceived efficacy and control in the prediction of optimization (Villegas, 2019).

With the use of the Internet, literature stands out because of the interrelationship between perceptions of utility, ease, efficiency, and control (Villegas *et al.*, 2019). The present work has shown that the perception of utility associated with the perception of effectiveness generates a structure that determines the use of the Internet.

Research lines concerning the associative structure of the perception of utility with the perception of efficiency and these as determinants of the use of the Internet will explain the rational, deliberate, planned and systematic process of acceptance of technology

CONCLUSION

The objective of this paper was to specify a model based on the theory of mobile consumption, which highlights the relationship between perceptions as determinants of the use of technologies, devices, and networks.

However, the present work proposed a modification of the perceptual structure to increase the predictive power of the theory of mobile consumption, highlighting the association between the perception of utility and the perception of efficacy as predictors of behaviour.

Research lines concerning the predictive structure of electronic consumption will explain the associative relationship between utility and perceived effectiveness, as well as its impact on the use of the Internet.

The present study allows us to conclude that the perception of usefulness is the main determinant for the use of the Internet for academic purposes, which suggests two relevant aspects: the first one is that people use the Internet based on the activities that they perceive as they are more useful and efficient when done

through their electronic devices; The second aspect is oriented towards the fact that Educational Institutions could improve the reading and use of academic sources using electronic devices as a means, that is, if educational institutions wish to achieve that their students increase the reading and the use of academic references, this could be achieved if the perception of usefulness is improved, through messages aimed at disseminating said usefulness.

This study opens the door for future research that seeks to develop schemes or methods designed on digital applications for access to academic databases and their use as a source of information. Understanding that perception determines use is relevant for the design of strategies that effectively increase the use of the Internet and information technologies for the dissemination of knowledge.

Finally, regarding the interrelationships of individuals, it is clear that one of the reasons why young people use their smartphones is due to the usefulness of social networks in the efficiency of communication. In this sense, it is likely that in the future, social networks can be used as an example for scientific communication and the dissemination of academic topics, research products or about information necessary for the educational development of students.

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