

RESEARCH ARTICLE

Structural equation model of entrepreneurship in downtown Mexico during the COVID-19 era

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Abstract: Entrepreneurship is a construct that has been measured from two main dimensions including resource optimization and process innovation. The objective of this work is to corroborate the dual structure of entrepreneurship. An exploratory, transversal and psychometric work was carried out with a selection of sources indexed to national repositories. The findings were selected considering the period from the pandemic from December 2019 to April 2022, as well as the keywords of entrepreneurship, innovation and optimization. A factorial structure of two components was found that explained the highest percentage of variance. In relation to the state of the art, it is recommended to include the dimension of opportunism to increase the explained variance and adjust the model to the most recent studies that report a third dimension related to the opportunities of the health and economic crisis.

Keywords: COVID-19, entrepreneurship, opportunism, Mexico

1 Introduction

The aim of this study is to specify a model for the study of social entrepreneurship in household heads. From a review of the literature, the variables that allowed the systematization of the determinants of entrepreneurship paths are extracted [1].

The principles that guide the rational choice lie in the tastes and preferences crystallizing objectives of the actors. Therefore, before taking any decision binding preferences strategies, achieve collect information that will determine the election [2]. If individuals rather have an indeterminate number of tastes, objectives and goals, then your preferences will no longer depend on their capacity of choice and action [3]. Therefore, they act in a non - rational way.

The rational choice theory also warns that a decision is a result of an estimate of the costs and benefits of carrying out an effort regardless of their degree of significance [4]. This is a utilitarian dimension in which control of a situation from establishing a favorable balance of benefits versus costs will determine the election [5]. More specifically, the benefits and costs translate into a ratio of risk, effort and reward. This means that a choice be rational when the risks and efforts are minimal provided that the rewards are greater.

In contrast, when the recognition of an effort and risk not up to expectations, then the choice has not been entirely rational and rather approaches an irrational dimension if the risks and efforts are increasing and intense with respect to the absence of rewards [6]. This is because the individual who tries is committed to the risks that will be activated by profit expectations [7]. Integrating each of the variables represents a series of paths in which the correlations explain each choice [8].

In short, the rational choice explained in general terms the process by which preferences are the determining factor by other factors which generate information or sense an atmosphere of certainty when deciding and act accordingly [9]. To the extent such information is available, accessible and actionable, then the rational choice will emerge as an option, but rather proliferates ambiguity, then a non - rational decision will be generated with irrational consequences [10].

However, when information is not available or is very abstract, rational choice is replaced by a tighter option to culture; values and norms of people with respect to a contingency which no known precedent some, but people always react the same way [11]. If rational choice is

brewing from preferences based on information available to determine tastes and objectives, the prospective attitude suggests that the absence of information creates uncertainty that determine risk aversion or waiver of certain gains and risk appetite when losses are imminent [12]. Thus, the utility, benefit or happiness crystallize into losses or gains, circumventing the process of rational choice and legitimizing an irrational choice [13]. Therefore, a prospective is more than a decision lies in attitude and expectation of risk or certainty to gains and losses in the immediate future. In that sense, a retrospective is an attitude that is the same relations, but compared to last.

In short, the prospective attitude is a hinge between rational choice and reasoned action [14]. Each of these theoretical and conceptual frameworks based its scope and limits from the availability of information, assuming that the individual is able to assume an attitude, make a decision or take an action that corresponds to the available information and representation that you have it [15]. Unlike the rational choice theory that focuses on the usefulness of the information available and the theory of prospective attitude that focuses its interest in the certainty of the information, the theory of reasoned action assumes that information, any it is, it is a general environment that will influence the behavior to the extent that information is transformed into rules [10]. This is because the theory of reasoned action considers that all information is cognitively processable. Therefore, an overview of the environment, their demands and opportunities conducive categories of accessible and abundant availability of information that will influence a spendthrift behavior such as believing that jobs, wages and financial credits significantly increase [16]. On the contrary, if one considers that the context is rather recession and economic crisis, then austere styles, cooperative and innovative life will be adopted.

However, the theory of reasoned action, like the rational choice theory and the theory of prospective attitude, pose a general scenario incident on a specific behavior without considering the current situation and specifies decision maker [17]. Given that the information is not available or is processable actors requiring immediate planning of their actions, the determinants of the planned behavior are those in which information can be delimited and specified depending on a particular situation or to an event which is the subjective control from decision-making and the information available and actionable. The theory of planned behavior finds that perceived control is a significant determinant of behavior in direct and indirect mode [18]. To interact with subjective norms and attitudes generate an intention that is also assumed as a determinant of behavior.

However, its perceived control, as the norm and attitude, depend on a set of beliefs about information availability. In this sense, the specification of a model would include variables that anticipate the behavior, but not from the beliefs of availability of information, but from provisions to cooperate by actors that form an entrepreneurial project to develop their skills, not only of choice, deliberation or planning, but innovation [9].

2 Materials and methods

Documentary, exploratory and retrospective work was carried out with sources indexed to international repositories, considering the edition period from 2019 to 2022, as well as the advanced search by keyword of "entrepreneurship". Matrices of content analysis and opinions were used. It includes findings regarding the dimensions of entrepreneurship, as well as the parameters of factorial weights, the qualifications of judges who are experts in the field, the feedback between judges, the differences and similarities established. The information in the qualitative analysis package version 3.0 was processed considering the parameters of normality, contingency and proportionality for the contrast of the null hypothesis regarding the differences between the findings of the literature and the opinions of the experts in the field.

3 Results

The information in the qualitative analysis package version 3.0 was processed considering the parameters of normality, contingency and proportionality for the contrast of the null hypothesis regarding the differences between the findings of the literature and the opinions of the experts in the field (see [Figure 1](#)).

The contingent relationships between the findings reported in the literature regarding the qualifications of judges suggest significant differences [Opportunism: $\chi^2 = 14.21$ (23 gl), $p < 0.01$; Optimization: $\chi^2 = 15.46$ (17 gl), $p < 0.01$; Innovation: $\chi^2 = 16.57$ (21 gl), $p < 0.01$]. In other words, the results reported in the literature are different from the criteria of the judges regarding entrepreneurship (see [Figure 2](#)).

Probability ratios indicate that the results reported in the literature and the qualifications of judges are within a permissible risk threshold that would explain the convergence of these two systems [Opportunism: OR = 14.24 (13.24 to 35.46); Optimization: OR = 24.32 (18.23 to 54.32); Innovation: OR = 21.21 (19.06 to 36.57)].

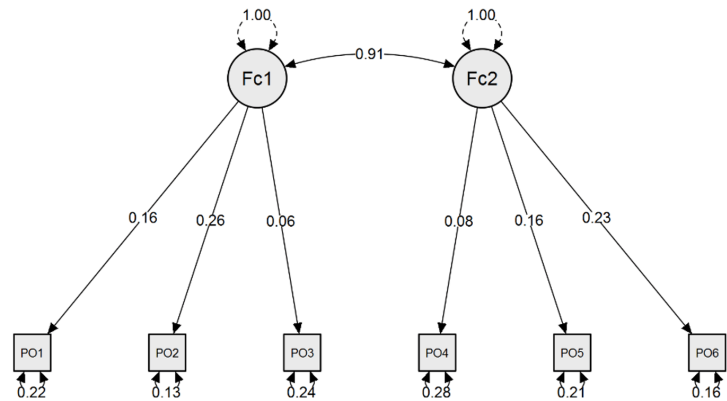


Figure 1 Confirmatory factor analysis (Source: Elaborated with data study)

	P01	P02	P03	P04	P05	P06
P01	0					
P02	0	0				
P03	.16	.06	0			
P04	.05	.07	.04	0		
P05	.02	.02	.11	.17	0	
P06	.03	.04	.07	.04	.02	0

Figure 2 Misfit (Source: Elaborated with data study)

4 Discussion

From brandished variables; beliefs, rule, attitude, perception, intention and behavior, you can specify a model for the study of social entrepreneurship in household heads engaged in the production and marketing of coffee. The model includes eight hypotheses. This is the case of social work that develops in health institutions and educational. Often, the practitioner of Social Work promotes sexual rights in an open group of people without considering other factors that information concerning sexual health, with emphasis on sex or coital [18].

In scenarios such as broadcast stations public transport system or concourses, the promoter exposes the benefits of using condoms to negotiate safe sex. The goal of this promotion is to influence consensual sex from use almost always male or female condom. Is a more focused advocacy groups exposed to sexually transmitted diseases (STDs); sex workers or people on the street? The aim of such promotion is to provide a tool to avoid getting an STD again, focusing on the lifestyles of potential victims. In schools and health centers, promoting sexual rights seeks to counter the effect of the norms and values that proliferate in the beneficiaries or students about the myths and realities of sexuality. It is considered that prevention should be focused on changing sexuality limited exploratory concerted and sexuality [19, 20].

This is an innovative path, as the literature reviewed, has not contemplated the possibility of integrating the promotion of sexual rights as a determinant indirect attitude towards entrepreneurship. This is because the impact on the beliefs of sexual control means planning that could spread and impact on an entrepreneurial project of social character as is the case of a cooperative. That is, if the household heads know the basics of planning, then you can implement this tool in creating a socially responsible company. On this track, the successful cases of promoting reproductive health on birth control and reducing the population explosion are strong evidence that the information specifically on a particular situation as a better quality

of life in small families adopting generated and contraceptive methods and family planning techniques.

Once in health centers or public schools has spread information about sexual rights, negotiating with himself and with others about exploring tastes, needs and sexual preferences, then seeks to observe this process in decision-making at the choice of partner, negotiating condom use or agreement to request termination of pregnancy through the morning - after pill or medical care. If it is possible to establish a link between the processing of information regarding the planning of sexuality and it is possible to observe their effects on favorable attitudes to entrepreneurship, then it is useful to identify the cases of those who were intended to share entrepreneurial projects with some companions of the course or workshop planned promotion of sexuality.

The effects of distributing emergency contraception or requesting abortion assisted on the control of sexual encounters and STD prevention can be seen in the intentions of carrying out actions that promote lifestyles planned regarding improvised decisions. In this path, the promotion of indirect sex as determining rights of social entrepreneurship is particularly important, since diffusion of unprotected sex, the use of morning - after pill or any application for termination of pregnancy would be indicators of a personal and group change in different circumstances and in different situations with regard to management and time management which is an estimate of hours devoted to the development of a project.

This is a widely recommended by the literature reviewed path, as it explains in detail the stages that information about opportunities and capabilities entrepreneurship affect family planning decisions or where appropriate the adoption of methods and techniques that favor the development of women with the opportunity to not only prevent pregnancy, but also develop strategies for socially responsible entrepreneurship. That is the profile of these women would be to prioritize the avoidance of pregnancy is an opportunity to organize themselves to ensure a favorable themselves and the group they belong income as well as provide a financial guarantee for their future descendants if the case, or, supporting single mothers who do not have the possibility of undertaking a project.

Although the literature identifies hypothesis as the most viable, in this case 8c is possible to notice that the path includes variable perceived control as a determinant of decision-making and entrepreneurial action. This variable involves a high degree of family or temporary planning from which it is possible to anticipate scenarios of unwanted pregnancies, cultural and family pressure, marital conflict or any other factor that inhibits the decision to prioritize entrepreneurship and innovation at the option of pregnancy and parenting.

5 Conclusion

The specification of a model for the study of entrepreneurship in household heads is the contribution of the state of knowledge work. From a review of the literature the eight hypotheses explaining three paths of correlations between the variables put forward in the literature reviewed were specified.

However, studies of social work around the venture have not included variables that explain the decision-making and entrepreneurship from affectivity, emotionalism or sentimentality associated with female gender identity. In this sense, the literature seems to corroborate the hypothesis around which the male identity is enterprising and as such are attributed innate abilities of opportunism, management and negotiation lacks female identity.

However, studies of the promotion of entrepreneurship locate these assumptions in an ambivalent sexism, because on the one hand emphasize the feminine attributes of good treatment and friendliness but extol the perception of opportunity and negotiating skills as own identity male. It is therefore necessary to review theoretical, conceptual and empirical frameworks with a gender perspective to demonstrate the scope and limits of female and male identities to an entrepreneurial opportunity.

The specification of an integrated model in which the gender perspective is included, explain the scope and limits of feminine identities and masculine identities to the entrepreneurial opportunities because the model should overcome the traditional sexism and ambivalent sexism to explain entrepreneurship in single mothers and female heads of households engaged in trade, buying and selling products at retail.

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