

European Journal of Educational Research

Volume 8, Issue 3, 809 - 826.

ISSN: 2165-8714 http://www.eu-jer.com/

Budget Plan to Manage Income and Expenses in College Students: Some Features that Explain It

Arturo Garcia-Santillan*

Universidad Cristobal Colon, MEXICO

Teresa Zamora-Lobato Instituto Tecnologico de Xalapa, MEXICO Jesica J. Ramos-Hernandez Universidad Cristobal Colon, MEXICO

Received: May 23, 2019 • Revised: June 19, 2019 • Accepted: July 5, 2019

Abstract: The purpose of this study is to describe the actions taken by college students to face their future retirement. For this, the test designed by the National Commission for the Protection and Defense of Financial Services Users (CONDUSEF) in Mexico was used, which has items related to financial knowledge, specifically topics about savings, emergency funds and life insurance, among others. The instrument was applied to 60 UPAV college students of different levels, during the school cycle of February-August 2018, in the city of Xalapa, Veracruz; it should be noted that the range of age was older than 21 but younger than 23 years old. The descriptive analysis showed results that lead us to believe that students have emergency funds (53%) but these are used to face unexpected situations (59%); also, students do not have life insurance, which could be concerning in their personal and family life if/when they have to face a present or future illness. Regarding car insurance, most of the respondents stated that they do not own one, besides considering it an unnecessary expense. One of the study limitations was the surveyed population; hence the need to widen this research to encompass more students from such geographical area in order to obtain a wider outlook of said behavior.

Keywords: Prevision plan, savings, life insurance, car insurance.

To cite this article: Garcia-Santillan, A., Zamora-Lobato, T., & Ramos-Hernandez, J. J. (2019). Budget plan to manage income and expenses in college students: some features that explain it. *European Journal of Educational Research*, *8*(3), 809-826. httpS://doi.org/10.12973/eu-jer.8.3.809

Introduction

Background and problem statement

Financial planning and budgeting allow a person to analyze their current situation, choose alternatives and make decisions regarding their financial goals and opportunities, taking control of their income and providing long-term stability and management of financial resources.

Nowadays, Mexico and several other countries are facing economic challenges which cast uncertainty in buying-selling operations of banking products and services, as stated by Moreno-Garcia, Garcia-Santillan; Bermudez and Almeida (2015), who also proved that this phenomenon has brought along a significant reduction on sales and therefore, is directly affecting companies' cash flow. The former produces concern in young people today since it is more difficult to have a saving culture and in turn, causes the non-fulfillment of contracted debts, whether individually or as a Company.

Nonetheless, in order to emphasize the subject theoretically, we consider the ideas of Gomez-Soto (2009), who highlights the importance of having financial literacy because it provides people with the necessary knowledge, skills and attitudes to adopt good money management practices for income generation, expense management, savings culture, excellent indebtedness care and even, investment.

Along these lines, this author points out to the existence of some studies where the level of financial literacy among young people and adults in the United States are low (Bernheim and Garret, 1996; Hilgert et al, 2003; Lusardi, 2009; OECD, 2008). In said research it is stated that financial literacy has positive effects in future savings behavior (Fry et al., 2008; Meier & Sprenger, 2008; Schreiner & Sherraden, 2007).

Also, there is evidence pointing out that good money management and exposition to economic environment are two factors for the development of savings behavior that can be fomented in kids (Sonuga-Barke & Webley, 1993 and Furnham, 1999).

© 2019 The Author(s). **Open Access** - This article is under the CC BY license (<u>https://creativecommons.org/licenses/by/4.0/</u>).

^{*} Corresponding author:

Arturo Garcia-Santillan, UCC Business School, Universidad Cristobal Colon, MEXICO. 🖂 arturogarciasantillan@yahoo.com.mx

Following the same lines of thought, other studies have emphasized the benefits of financial literacy for young people since it is on an early stage when financial culture is developed easily, both its understanding and impact are higher at this stage (Schreiner & Sherraden, 2007). Likewise, we can see that lately there have been more research work on saving, since it is a factor that contributes to national economic growth and it is beneficial for individual and homes, including those with low income (Sherraden, 1991; Schreiner & Sherraden, 2007; Shanks et al., 2010; Chowa et al., 2010).

Furthermore, there is a tendency nowadays to encourage a saving culture among people according to the first financial culture survey carried out by Banamex and UNAM (2008), where some findings are shown regarding the predominant beliefs of the Mexican population about money, saving and investment. Given the conditions related to low income, few Mexican people have surplus money to save, which is the reason why money is not associated with profitability and why there is not a saving culture. There is not, or at least there does not seem to exist, a saving culture, on the contrary, loans have increased, meaning in many cases, the loss of family patrimony when they are taken from banks, even from moneylenders who work illegally.

In relation to the subject of saving, the National Development Plan 2007-2012 and Pronafide (2008), mention that there is a small percentage of the population who admits to having a saving habit and from the percentage of the population who does not spend all their money, only 50% admits to allocate it as savings. People spend the most in basic items like groceries, housing and education, among others. In the survey, it stands out that the amount destined to debt payment (11%) is the same as the one for housing and higher than the amount for education (9%).

These figures have been part of the justification to orient the education program for the development of a financial culture, which has been stated in the National Development Plan (PND for its acronym in Spanish) 2007-2012 and in the National Program for Development Funding (Pronafide for its acronym in Spanish) 2008-2012. Both of these programs aim to formalize the participation of saving and popular credit entities for such end.

Specifically in the Mexican context, the "First Survey of Financial Culture in Mexico" stands out because from the results the program Knowing Matters was created. This survey was carried out by BANAMEX (a Mexican banking institution) and the UNAM (Mexico's National College) in 2008, having also participated the following entities and institutions: The Finance Commission for Ministry of and Public Credit (SHCP), National the Protection and Defense of Users of Financial Services; Mexico (CONDUSEF), Bank of Mexico, CONSAR National Commission for the Pension Saving System, The Association of Banks of Mexico (ABM), Mexico's National Population Council (CONAPO), Economic Commission for Latin America and the Caribbean (CEPAL), World Bank, The Organisation for Economic Co-operation and Development (OECD), Organization of American States (OAS), Inter-American Development Bank (IDB), United Nations (UN), The United Nations Development Programme (UNDP), The National System for Integral Family Development (DIF), Opportunities programme coordinated by the Ministry of Social Development (sedesol) Oportunidades (which participates with the survey "what poor people say"), the Secretary of Public Education. (SEP), INEA is an internationally acknowledged leading institution in adult education in Mexico, National Youth Survey, The Mexican Social Security Institute (IMSS), Secretary of Economy (SE), National Microentrepreneur Financing Program (Pronafim), Federal Attorney's Office of Consumer (PROFECO), Microfinancieras, as well as academic institutions (The National Autonomous University of Mexico UNAM, Ibero-American University, Mexico; (UIA), Mexico Autonomous Institute of Technology (ITAM), Monterrey Institute of Technology and Higher Education (ITESM), The Center for Economic Research and Teaching (CIDE), College of Mexico (Colmex), National Polytechnic Institute (IPN).

The main aim of this survey was to identify the knowledge level and perceptions about different saving and credit instruments, as well as their judgement about formal and informal financial products and services. The spending habits, ways of saving and existing loans in households were also measured, as well as some aspects about their attitudes and values towards spending, saving and financing.

As a result of the survey, an incipient culture about "expense control and planning" was identified; approximately one of five households has an expense log or income, debt and saving planning. On the other hand, both in daily family expense as well as in the possible motivations for saving, priorities are oriented to cover the most "immediate", mainly food, health and education, yet it must be pointed out that saving is not part of family habits.

However, due to the international financial crisis, several entities lead by the OCDE (2007), have highlighted the great impact of saving for individuals, which has created the basis for several diffusion programs on financial literacy.

In this matter, the OECD, along with the European Commission and some national and international institutions, have launched the initiative for the Edufinet (2007-2017) which is created as a tool for active users and those who can be included to financial services in the future. This project aims to bring young people closer to the financial market, instructing them from a practical guide about financial products and services. It is important to mention that this project not only helps to educate young people in making a purchase project but they are also counseled about future retirement.

The former seeks to create a saving culture among young people, which allows them to face a future in better retirement conditions and to be able to face possible unexpected situations, because both, public and private pension funds, have been negatively impacted nowadays by the same volatility effect in investment funds, where pension funds are invested by the Afores (retirement funds administrators) (Malroutu y Xiao, 1995), although Devaney and Chiremba (2005) proved that there is a higher probability of saving for retirement the older the individual is.

Additionally, it is important to mention that the education level is usually related positively, as stated by the Jump\$tart Coalition survey, where 68.5% of middle school students had a savings account (Mandell, 2005), proving that there is a wide sense of responsibility and culture regarding saving. Also, this survey reported indicators about the financial knowledge of students: for instance, the Native-American, Hispanic and African-American achieved the lowest test scores with 45%, 47% and 44% respectively, while White students obtained a mean score of 55% and in said study, students from low-income families obtained even lower scores than those with higher income (Mandell, 2008).

Although studies do not have absolute results on financial literacy related to saving, given that the factors of education level, income and current economy of a country influence financial literacy, these results are usually directly proportional in the case of savings (Bajtelsmit, 1999; Berheim & Scholtz, 1992).

Moreover, Karlan & Morduch (2009) have studied the possible differences between low and high-income people regarding saving. They found out that people with lower income have not approached financial products and services such as: savings account, automatic transference, savings bonds and deposit certificates, to mention a few. In the contrary, people with higher income have had a more pronounced approach to this sort of financial products.

Until now, we have been able to see different findings and proposals from some authors, as well as institutions who have studied the subject of saving in order to better include people in financial products and services with the aim of reactivating and improving a nation's economy.

With the above-mentioned arguments, it has been proven that people who are financially included in financial topics have a positive trait for their future. Also, we must remember that there are legislation initiatives and public policies which are promoting and developing efforts on financial education, as stated by the Economic Policy Institute (EPI). According to the document "Individual Development Accounts (IDA)", the Department of Labor of the United States has launched the campaign Retirement Savings Education, which has information for employees, small companies and patrons about retirement savings and tools to begin with, said initiative started in 1990 on said country.

After this introduction to the subject, it is pertinent to state the following research question: what are the characteristics that define the prevision plan of students to face their future? Therefore, the aim of this study is to describe the actions that are being taken by college students to face their future.

Literature review

For the development of our research, we use as reference the literature related to the subject of saving and retirement planning.

There are several authors who approach the subject of saving from a perspective about investment, such as King and Levine (1993); Beck, Levine and Loayza (2000); Klapper, Laeven and Rajan (2006); Beck, Demirguc-Kunt and Levine (2007); Demirguc-Kunt and Levine (2009) and the World Bank (2008), all of whom proved that, in order for financial systems to work properly, they must offer a variety of products and services adapted to the needs of people. The former can be used to benefit the most vulnerable people, who depend on their own savings for education and also, financial systems (banks and private companies) can promote an innovation or entrepreneur culture by giving the opportunity of saving to people, because by investing their savings, they can use them to generate profit, thus increasing their patrimony.

Even though the number of people who have a savings account in a financial institution has increased from 51% in 2011 to 69% in 2017 (The Global Findex Database 2017), there are still many adults who do not have one. Therefore, it is important to highlight that most people stated to saving money informally, that is, by not using a financial institutions to do so.

In the case of people who do use formal saving products and services, they state that this is due to the fact that financial institutions have saving programs which are adequate to their saving needs and therefore, this individuals are able to save using the options provided by their bank.

Additionally, the research by Sterns (1998), Kotlikoff and Morris (1989), Ferraro and Su (1999), Blank (1999), Kleinman, Anandarajan and Lawrence (1999) and Wiatrowski (1993) proved that demographic factors have great influence in retirement saving, highlighting the importance of savings for a person's future, since nowadays, most young people who are working will need to save money due to new retirement reforms and that saved money will be used for their own support.

From a psychological perspective, we can mention the studies by Bassett et al. (1998), Grable and Lytton (1997) and Mitchell and Moore (1998), which state that retirement saving depends on the human being age and income, being

these two factors that highly influence this kind of decisions. Similarly, Hershey and Mowen (2000) found that in individuals whose age is between 35 and 88 years old, their financial maturity is positively proportional to their age, meaning that the older they are the better decisions they make.

On the contrary, DeVaney and Su (1997), as well as Yuh and Olson (1997) point out to financial literacy depending more on educational level and, since there young people have more financial knowledge, they also have approached financial services more. However, Lewellen et al., (1975), Glass and Kilpatrick (1998) and Henkens (1999) consider the prime factor for saving decisions to be the marital status and this makes sense because the responsibility of a family causes people to be more conscious about creating and increasing their patrimony, so as to have better economical stability and certainty for the future.

As stated above, it is possible to see that there are several factors that impact young people's saving behavior and retirement planning. We should take into account what Lusardi (1999) mentioned about people receiving less income when they are retired than when they are active. This fact leads to the importance of people having a saving culture in order for them to have their savings in addition to their retirement pension, which has a positive effect in a person's and his/her family wellbeing (Bernheim, Skinner and Weinberg, 1997; Burtless, 1999).

In the case of Mexico, there are laws such as the Law for retirement savings system, which must states that the employee has an individual saving account where both employer and employee deposit their shares for the retirement fund, unemployment in old age and seniority, which will be managed by the Retirement Saving System (SAR for its acronym in Spanish). Conversely, the National Commission of Retirement Saving System (CONSAR for its acronym in Spanish) points out that in 2018 there was an increase in the amount of resources gathered in the Retirement Saving System (SAR) in relation to the previous year in the months of December (2017) and January (2018).

Method and Procedure

It is a non-experimental and descriptive study aimed to define, from a data analysis, some characteristics or actions that will make up the prevision plan of college students to face their still distant retirement in the future.

Population and sample

The population subjected to study is made up by 60 students enrolled in the period of January-June 2018 from Calmecac University in the region of Xalapa, capital of Veracruz state. As part of the justification regarding the selected population, we must remember that in the National Development Plan (PND for its acronym in Spanish) 2013-2018, it is stated that Mexico is an inclusive country, where the rights of the citizens are not only an ideal but a permanent reality in the life of its inhabitants. Also, said document mentions the relevance of all Mexicans having saving accounts, insurance and the possibility of obtaining a credit to develop or start any Project, as well as the need to have economic solvency in order to pay the several services, debts or loans they could have.

Moreover, the PND refers that nowadays, 56% of the population has some kind of financial product, such as a credit, saving account or some sort of insurance, and this figure is rising; besides, 12.7 million people have been incorporated to the financial system. Taking this information into account and having obtained verbal permission from the Calmecac University executives, the study took place with the participation of Law students.

Therefore, it can be said that the sample determination was non-probabilistic, given it was selected by convenience. In such manner, 60 college students were surveyed, having complied with two basic inclusion criteria: being present at the moment of the survey and being enrolled without any debts from past courses.

Instrument

In order to obtain the data for the field research, the instrument designed by the CONDUSEF⁺ is taken, which gathers questions about the actions taken by students to face an unexpected situation, as well as the existence of any fund (according to their own possibilities) for emergencies and, if so, where is it stored or where is it saved, and it the family or someone in particular knows about this; also, there are questions about what is the purpose of said economic fund, in case they have one. Other significant information that can be found with this instrument is about the possibility of having some kind of life insurance in case of disease or accident and if they have their own car or a family car insured.

Measurement procedure

For the data analysis, the software SPSS is used to calculate means and standard deviations of each one of the instrument's variables. The obtained frequencies of each test item are shown in their respective graphics.

[†] The instrument's questions can be consulted on the CONDUSEF website: http://www.condusef.gob.mx/Revista/index.php/usuario-inteligente/test/432-descuidado-o-prevenido

Data analysis and discussion

The data obtained from the sociodemographic profile of the surveyed students are shown in table 1 while table 2 shows the items related to actions regarding a prevision plan for the future:

Variable	Valid N	Mean	Minimum	Maximum	Std. Dev.
Gender	60	1.566	1.000	2.000	0.499
Age	60	2.633	1.000	4.000	1.163
Marital Status	60	5.750	1.000	6.000	0.836
Employment status	60	1.850	1.000	3.000	0.546
Type of work	60	1.750	1.000	3.000	0.815
Family members	60	1.700	1.000	3.000	0.618

Table 1. Descriptive data of socio-demographic profile

For the socio-demographic profile, the variables of gender, age, marital status, employment status, type of work and number of family members were considered.

Vari	iable V	/alid N	Mean	Minimum	Maximum	Std. Dev.
Х	K1	59	1.881	1.000	3.000	0.966
Х	X2	59	2.050	1.000	4.000	0.972
Х	(3	59	1.728	1.000	3.000	0.715
Х	Κ4	59	1.644	1.000	3.000	0.846
Х	(5	59	2.152	1.000	3.000	0.943
Х	Κ 6	59	1.881	1.000	3.000	0.892
Х	ζ7	59	2.338	1.000	3.000	0.902
Х	(8	59	1.915	1.000	3.000	0.970

Table 2. Descriptive data for instrument's items

Graphically it is possible to visualize that the surveyed population's age varies from 17 to 23 years old, being the higher frequency 23 or more years old, as reflected by the 33% obtained for this range. Lastly, the lesser percentage was the students older than 21 but younger than 23 years old. Mostly the percentage of all the ranges seems balanced.



Graphic 1. Surveyed students' age

Regarding the marital status of the students, we can see in graphic 2 that 90% are single, 8% stated to be married and only 2% live in common law.



Marital status

Graphic 2. Marital status

Employment status



Graphic 3. Employment status

In relation to marital status, graphic 2 shows how most of the students are single, while graphic 3 shows that 68% of students study and work, followed by 23% who only studies. This last information seems coherent since the average age is between 19 and 23 years old, as mentioned in graphic 1. Finally, 8% stated to be dedicated to study but also looking for a job.



Type of work

Graphic 4. Type of work

In the range of students who are currently working, 48% have a permanent job, while 28% have occasional jobs and the rest (23%) are unemployed since they only study (graphic 4).



Family structure

Graphic 5. Family structure

About the family structure of the surveyed household, in graphic 5 it is possible to see that most are individual who live at home and share it with 4 to 6 people (53%). This data seems logical considering the sort of students surveyed, which are college students who remain single (90% according to graphic 2).



How to face an unexpected event



Regarding the question about how to face an unexpected event in case it presents itself, students had as options: A (I have an emergency fund), B (I have insurance) and C (I borrow from the bank or my family). The results in graphic 6 show that 53% said they have an emergency fund, or at least that was what they answered. Even though they are students and their job and income is not high, we could think that said emergency fund might be proportionally similar. On the other hand, 41% said that in case of emergency they would borrow from the bank or family, which could be logical since 68% of the surveyed works and studies (graphic 3), thus, this behavior is understandable.



Do you have an emergency fund?

Graphic 7. Do you have an emergency fund (savings for an unexpected event)?

Question 7 seeks to know if the student has an emergency fund to face an unexpected event, considering the answers: A (Sure, I always allocate a part of my income for this purpose), B (I have savings but not precisely as an emergency fund), C (I borrow from the bank or my family) and D (No, it is difficult for me to save money).

Results show that 42% does have a savings but not precisely as an emergency fund. However, we must remember that the surveyed population was comprised by students and even though some had permanent jobs, the income cannot be very high and thus, said fund is probably not a saving account as such. It is also important to mention that 32% declared to always allocate a portion of income to this purpose, which seems coherent since 48% of students have permanent jobs (graphic 4).

In relation to the question about where they keep their emergency fund, the options were: A (a bank, so I know my money is safe), B (I have a moneybox where I deposit money once in a while) and C (when I can save, I store it under the mattress). Graphic 8 presents the results next.



Where do you store your emergent fund?



As we can see in graphic 8, 42% of the surveyed chose option A (bank) and another 42% chose option B (moneybox), which even if it makes up for most of the population (84%), it is still worrisome that 42% of students chose a moneybox to store the emergency box because there is a higher risk for the money to be stolen by third parties.

In the question about the use of the emergency funds, the following options were given: A (Attenuate the consequences of an unexpected event), B (Occasionally, they help me reach the end of my biweekly salary period) and C (What I save, I use it to buy clothes or footwear). Next, graphic 9 presents the results.



Graphic 9. You use your emergency fund for:

The results on graphic 9 shows that 59% of the surveyed population chose the first option, which is "Attenuate the consequences of an unexpected event", being this, a rational choice.

This result is cause of concern, because another 41% have a saving fund, not only to face an emergency but to buy clothing and footwear or even to reach the end of the month, which is valid, but basic aspects should be considered within the income, not in the savings used for unexpected circumstances.

Furthermore, the result leads us to think that it could be a problem related to a lack of knowledge about financial products, which could be solved with a higher level of financial literacy in order for them to invest in financial products and services according to their particular needs that will help them to better manage their resources and not spend their savings in basic needs.

In the question about having life insurance, the following options were given as answers: A (Yes, there are no guarantees in life), B (No, I canceled it when I found out if I survive I will not receive money) and C (No, I have never thought about death). Graphic 10 show the results next:



Do you have life insurance?

Graphic 10. Do you have life insurance?

According to the results 53% chose the third option, which is "No, I have never thought about death" and this should be a cause of concern since one thing is sure in life and that is death even though people do not necessarily think about it. However, the results mean that most people from the study does not consider this situation as an emergency, so there is a lack of interest about this matter.

Nonetheless, besides considering the former as carelessness, we believe there is an underlying problem related to a lack of knowledge about the benefits of a life insurance. It can also be inferred that students who work prioritize other expenses other than a life insurance and which can be even more expensive.

Thus, there seems to be a disregard about the impact of a life insurance in the family's economy since only 37% of students is conscious about this issue. Next, we can see the results about how to face an accident in graphic 11.



If you had an accident, how would you face it?

Graphic 11. If you had an accident, how would you face it?

The possible options about how to face an accident were: A With the emergency fund I have, B (With the credit card, I have it for any emergency) and C (borrowing from family or Friends and if they don't have, from the bank). 46% answered that they would face it with the emergency fund they have, followed by a 34% who would appeal to family and friends or even ask for a loan in a financial institution.

It must be mentioned that if one does not have economic solvency or credit history, financial institutions would hardly provide a loan to a person, so it is important to have a saving or investment account in order to have a credit history from banking institutions, as stated previously.

For the specific case of an accident directly related to a car, it is common in households to insure the car, since insurance is mandatory for cars bought using credit and in most states it is also mandatory by law.

For other sort of accidents the benefit of medical insurance can be a good choice to face the significant cost that can be paid from such an accident.

Interesting information about medical insurance is that it is likely that some insurance companies may have had an approach to students with information talks. This is due to the fact that Mexican students most have social security, meaning that they must have medical coverage just for being students.

Education institutions have usually some kind of insurance hired for students to cover medical expenses in the event that it is required and we should take into account that it is a social security subject included in the curricula of high-school institutions.

Graphic 12 shows the answers about car insurance, whose options are: A (Yes, no one is exempt from an accident), B (I had one but I didn't renew it) and C (No, it is an unnecessary expense).



Is your car insured?



As it can be seen, the student's perception towards the need of having car insurance is not entirely favorable, since 63% of students consider it an unnecessary expense. Only 29% of the cases show approval towards car insurance.

Regarding the question about the knowledge of the family about the location of the emergency fund, the options were: A (Of course, it is of the outmost importance so my loved ones are protected), B (Only my wife, I haven't told my kids) and C (No, since they can misuse my savings), in graphic 13 we can see the results.



Does your family know where your emergency fund is?

Graphic 13. Does your family know where your emergency fund is?

The results in graphic 13 show that 51% have an emergency fund and their family knows where it is but 42% mentions that in the event of an emergency, their family does not know about the existence of said fund because they believe that if their family know about its location, they could misuse the fund.

With this descriptive analysis, we aimed to obtain some basic elements that allow us to know about the characteristics of the prevision plan that students have to face future emergencies. The results from this research are discussed next.

Discussion of Results

The financial system's development contributes to the economic growth of a country and for the financial system to benefit the population, it is important that the citizens are financially educated.

However, other authors like Reasie, Weber and Yarbrough (2001) have found that many college students are not knowledgeable about personal finances and do not know how to manage their money.

Chen and Volpe (1998) also found a lack of financial knowledge in college students, concluding that this limits their ability to make informed decisions.

The present research has shown evidence that most of the surveyed students lack an emergency fund and it is also possible to observe their lack of knowledge regarding the variables: emergency fund, insurance and savings, which leads us to think that there is an underlying problem, considering that the questions were about basic financial knowledge. Thus, from the 59 cases, only 29% of the students are aware of the need of having an emergency fund and their lack of knowledge about financial matters is apparent.

The former hinders significantly the ability of these young people to make financial decisions, which may cause them to fall into debt and limit their present and future financial resources. Furthermore, Bowen et al. (1997) stated that students will struggle to reach their financial goals if they do not have consistent money management practices.

Regarding the instrument used, the application of the test designed by the CONDUSEF has been replicated in several occasions along the country showing interesting findings, allowing to see that the knowledge level is way below the acceptable mean regarding emergency funds, insurance and savings, but it is not so in basic knowledge about emergency prevision, although in this last topic the score is barely above average.

An interesting data of this first analysis was that 32% of the surveyed students answered that they always allocate a part of their income for an emergency fund, even though the percentage is relatively low, for those who act in this matter, it is an acceptable action that favors making good financial decisions in the future. In this regard, the survey applied by Banamex in collaboration with the UNAM (2008) and CONDUSEF, showed a tolerable level of financial education, since in the topic of savings, people do so to have economic security.

In relation to insurance, the results hint the possibility of students having an approach to insurance companies, this because by law, students of intermediate and higher level of public institutions, have the right to be affiliated to the Mexican Institute of Social Security (IMSS for its acronym in Spanish) and to receive medical, pharmaceutical and hospital care (IMSS, 2015), This fact can mean that if these encounters between insurance companies and students have taken place, it is likely that the latter's doubts have been focused on issues such as management of risk, coverage and insurance premiums, among other subjects.

Despite the former, the results show that students do not have the necessary knowledge about insurance instruments, whether they are car, medical expenses, life or any other kind of insurance; this coincides with the findings of Lusardi (2008), who points out that people require basic financial concepts to make decisions about expenses and savings for their future; thus, not having that information causes the student's perception on insurance to be that it is not needed, besides the fact of insurance products and services offered by financial institutions not being adapted for students' needs.

Taking into account that this study aimed to measure the student's knowledge about savings and insurance, from his/her perception and knowledge about financial topics, it was necessary to use the survey designed by CONDUSEF (2018), whose main purpose is to obtain data regarding the actions taken by people in the face of an emergency, in relation to insurance or any kind of savings in bank accounts or other.

Among the research on insurance and savings market, there is the study by Banking and Insurance in Latin America BSLatAm (2016), which focuses on the acquisition of life insurance in several countries and where they state that in the specific case of Latin America (in countries like Mexico), situations like insecurity rise the risk level and as such, there isn't a life insurance culture, since people spend less than 3.00 USD a month in said insurance.

Therefore, it is possible to see the lack of financial culture that prevents young people from acquiring insurance or saving money for emergencies, behaviors that can hinder their financial wellbeing.

Conclusion and Suggestions

Considering specifically the topic of insurance, it is important to consider that it not only covers the knowledge about insurance instruments, but also includes the perception of people regarding those matters because their attitude affects the decision of hiring or not an insurance policy.

Likewise, it is essential to continue academic research that can be used as support in the promotion of insurance, in order to make students aware of the importance of a prevision plan in their life Project. This action may be a first step for people to make appropriate decisions and correctly use financial products and services that will help their financial wellbeing, increase their savings and patrimony.

On the other hand, the study of Shahrabani (2012) regarding the effects of financial literacy and emotions on intent to control personal budget in college students showed that a higher level of financial knowledge were positively affect intention to control one's personal budget, indicating that more knowledge about money management, as well as changing the attitude of young people towards money management are required to change budgeting intention.

The findings of Chan et al. (2012) support the need for financial knowledge as well, since they confirmed that healthy financial management practices of college students are related to financial knowledge, among other variables.

College is an important period in young people's lives since they are preparing in a certain career that will lead to a paid job, but as stated by Danes and Hira (1987), colleges but very little emphasis on teaching students how to manage the money they will soon be earning.

Parents usually overlook the importance of teaching their children financial skills for their adult lives, which is why college is where most people have to learn how to handle their money and mistakes can be costly (Jariah et al., 2004).

Under this premise, it is of the outmost importance that the citizens of Xalapa, Veracruz receive an education, not only cultural but also economic regarding personal finances and money management, especially because this knowledge may raise awareness about the need for correct management of personal finances, budgeting and the advantages of having funds that can be used in case of emergency.

Research on these matters can provide evidence of the lack of knowledge in certain topics, which can be used by colleges, government, ONG's and banking institutions to create education programs or at least, divulge information about personal finances, helping young people to have the knowledge required to make informed decisions about their economic resources and navigate the financial market to find products and services according to their needs, which may aid in the attainment of their financial goals.

References

- Banamex-UNAM (March, 2008). Primera Encuesta sobre cultura financiera en Mexico [First survey about financial culture in Mexico]. Retrieved from https://gruporepensares.files.wordpress.com/2011/11/cfmexico.pdf
- Bajtelsmit, V. L., Bernasek, A., & Jianakoplos, N. A. (1999). Gender differences in defined contribution pension decisions. *Financial Services Review*, 8(1), 1-10.
- Bassett, W. F., Fleming, M. J., & Rodrigues, A. (1998). How workers use 401(k) plans: the participation, contribution, and withdrawal decisions. *National Tax Journal*, *51*(2), 263-289.

- Beck, T., Levine, R., & Loayza, N. (2000). Finance and the sources of growth. *Journal of financial economics*, 58(1-2), 261-300.
- Beck, T., Demirguc-Kunt, A., & Levine, R. (2007). Finance, inequality and the poor. *Journal of economic growth*, *12*(1), 27-49.
- Bernheim, B. D., & Garrett, D. M. (1996). *The determinants and consequences of financial education in the workplace: Evidence from a survey of households* (No. w5667). National Bureau of Economic Research. Retrieved from https://www.nber.org/papers/w5667.pdf
- Bernheim, B. D., Skinner, J., & Weinberg, S. (1997). What accounts for the variation in retirement wealth among US households? (No. w6227). National Bureau of Economic Research. Retrieved from https://www.nber.org/papers/w6227.pdf
- Blank, E. C. (1999). Pension type and retirement wealth. *Industrial Relations: A Journal of Economy and Society*, 38(1), 1–10.
- Bowen, C. F., Lago, D. J., & Furry, M. M. (1997). Money management in families: A review of the literature with a racial, ethnic, and limited income perspective. *Advancing the Consumer Interest*, *9*(2), 32-42.
- BsLatAm. (2016). Mercado asegurador del Brasil se contrae un 6.20% interanual medido en USD [Brazil's insurance market contracted by 6.20% each year measured in USD]. Retrieved from: https://bit.ly/2JxytTy.
- Burtless, G. (1999). Effects of growing wage disparities and changing family composition on the US income distribution. *European Economic Review*, 43(4-6), 853-865.
- Chan, S. F., Chau, A. W. L., & Chan, K. Y. K. (2012). Financial knowledge and aptitudes: Impacts on college students' financial well-being. *College Student Journal*, *46*(1), 114-133.
- Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial services review*, 7(2), 107-128.
- Chowa, G., Ansong, D., & Masa, R. (2010). Assets and child well-being in developing countries: A research review. *Children and Youth Services Review*, *32*(11), 1508-1519.
- Cohn, R. A., Lewellen, W. G., Lease, R. C., & Schlarbaum, G. G. (1975). Individual investor risk aversion and investment portfolio composition. *Journal of Finance*, *30*(2), 605-620.
- CONDUSEF (2018). La Educacion Financiera. Una aliada en el manejo de tus finanzas. [Financial literacy. An ally in finances management]. Retrieved from: https://bit.ly/2LJIqzS
- Danes, S. M., & Hira, T. K. (1987). Money management knowledge of college students. *Journal of Student Financial Aid*, *17*(1), 4-16.
- Demirguc-Kunt, A., & Levine, R. (2009). Finance and inequality: Theory and evidence. *Annual Review of Financial Economics*, 1(1), 287-318.
- DeVaney, S. A., & Su, Y. (1997). Factors predicting the most important source of retirement income. *Compensation and Working Conditions*, *2*(3), 25–31.
- DeVaney, S. A., & Chiremba, S. (2005). *Comparing the retirement savings of the baby boomers and other cohorts*. Washington, DC: US Department of Labor, Bureau of Labor Statistics.
- Edufinet (2007-2017). Educacion Financiera en la red. Proyecto de responsabilidad social en la red [Financial literacy on the net. Social responsibility project on the net]. Retrieved from https://bit.ly/2G2dlnu
- Ferraro, K. F., & Su, Y. P. (1999). Financial strain, social relations, and psychological distress among older people: A cross-cultural analysis. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 54(1), 3-15.
- Fry, T. R. L., Mihajilo, S., Russell, R., & Brooks, R. (2008). The factors influencing saving in a matched savings program: Goals, knowledge of payment instruments, and other behavior. *Journal of Family and Economic Issues, 29*(2), 234-250.
- Furnham, A. (1999). The saving and spending habits of young people. Journal of Economic Psychology, 20(6), 677-697.
- Glass, J. C., & Kilpatrick, B. B. (1998). Financial planning for retirement: an imperative for baby boomer women. *Educational Gerontology*, 24(6), 595–617.
- Gomez-Soto, F. (2009). Educacion financiera: retos y lecciones a partir de experiencias representativas en el mundo. [Financial literacy: challenges and lessons from representative experiences in the world]. *Proyecto Capital enbreve No. 10.* Retrieved from http://repositorio.iep.org.pe/bitstream/IEP/1054/1/G%c3%b3mez-Franz_Educacionfinanciera-retos-lecciones.pdf

- Grable, J. E., & Lytton, R. H. (1997). Determinants of retirement savings plan participation: A discriminant analysis. *Personal Finances and Worker Productivity*, 1(1), 184-189.
- Henkens, K. (1999). Retirement intentions and spousal support: A multi-actor approach. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 54(2), 63-73.
- Hershey, D. A., & Mowen, J. C. (2000). Psychological determinants of financial preparedness for retirement. *The Gerontologist*, 40(6), 687-697.
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, *89*, 309-322.
- IMSS (April 18th, 2015). El numero de seguridad social del IMSS sera el mismo como estudiante y en la vida laboral. [The social security number will be the same as student and in working life]. Retrieved from https://www.gob.mx/gobmx/articulos/el-numero-de-seguridad-social-del-imss-sera-el-mismo-como-estudiantey-en-la-vida-laboral-afiliatealimss
- Jariah, M., Husniyah, A. R., Laily, P., & Britt, S. (2004). Financial behavior and problems among university students: Need for financial education. *Journal of Personal Finance*, *3*(1), 82-96.
- Karlan, D., & Morduch, J. (2009). Access to Finance. Chapter 2, *Handbook of development economics*, 5. Retrieved from: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.205.6947&rep=rep1&type=pdf
- King, R. G., & Levine, R. (1993). Finance and growth: Schumpeter might be right. *Quarterly Journal of Economics, 108*(3), 717–37.
- Klapper, L., Laeven, L., & Rajan, R. (2006). Entry regulation as a barrier to entrepreneurship. *Journal of financial economics*, *82*(3), 591-629.
- Kleinman, G., Anandarajan, A., & Lawrence, K.(1999). An analysis of the move toward defined contribution pension plans: are the rewards commensurate with the risks? *Journal of Pension Planning and Compliance*, *25*, 61–89.
- Kotlikoff, L. J., & Morris, J. N. (1989). How much care do the aged receive from their children? A bimodal picture of contact assistance. In D. A. Wise (Ed.), *The economics of aging* (pp. 151–175). Chicago, IL: University of Chicago Press.
- Lewellen, Cohn, R. A., W. G., Lease, R. C., & Schlarbaum, G. G. (1975). Individual investor risk aversion and investment portfolio composition. *The Journal of Finance, 30*(2), 605-620.
- Lusardi, A. (1999). Information, expectations, and savings for retirement. In H. J. Aaron (Ed.), *Behavioral dimensions of retirement* (pp. 81–123). Washington, D.C.: Brookings Institution Press.
- Lusardi, A. (2009). Household Savings Behavior: The Role of Financial Literacy, Information and Financial Education Programs. In Foote, C., Goette, L. & Meier, S. (Eds), *Policymaking Insights from Behavioral Economics*. (pp. 109– 149). Boston Massachusetts, USA: Federal Reserve Bank of Boston.
- Malroutu, Y. L., & Xiao, J. J. (1995). Perceived adequacy of retirement income. *Financial Counseling and Planning*, *6*, 17-23.
- Mandell, L. (2005). Financial literacy: Does it matter. Buffalo, NY: University of Buffalo.
- Mandell, L. (2008). The financial literacy of young American adults: Results of the 2008 National Jump \$tart Coalition survey of high school seniors and college students. Washington, DC: The Jump \$ tart Coalition for Personal Financial Literacy. Retrieved from: http://views.smgww.org/assets/pdf/2008%20JumpStart%20Financial%20Literacy%20Survey.pdf
- Meier, S., & Sprenger, C. (2008). Discounting financial literacy: Time preferences and participation in financial education programmes (IZA Discussion Paper No. 3507). *Journal of Economic Behaviour and Organization*, 95, 159–174
- Mitchell, O. S., & Moore, J. F. (1998). Can Americans afford to retire? New evidence on retirement savings adequacy. *The Journal of Risk Insurance*, 65(3), 371–400.
- Moreno-Garcia, E., Garcia-Santillan, A., Bermudez, A., and Almeida, P.C. (2015) Restructuring debt proposal in three hypothetical scenarios: Equal payments, different amounts and one unknown payment, different amounts and three unknown payment. *Journal of Progressive Research in Mathematics*, 4(1) 233-246.
- OECD (2008), Education at a glance. OECD Indicators 2008. Retrieved from: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.220.136&rep=rep1&type=pdf

- OECD (2007): Giving Knowledge for Free: The Emergence of Open Educational Resources. Retrieved from: https://www.oecd.org/education/ceri/38851849.pdf
- Plan Nacional de Desarrollo [National Development Plan] 2007-2012. Retrieved from: http://pnd.calderon.presidencia.gob.mx/pdf/PND_2007-2012.pdf
- Programa Nacional de Financiamiento del Desarrollo [National Program of Development Financing] 2008-2012. Retrieved from: https://bit.ly/2Y2zKeF
- Reasie, H., Weber, J. G., & Yarbrough, D. (2001). Money management practices of college students. *College Student Journal*, 35(2), 244-244.
- Schreiner, M., & Sherraden, M. (2007). Can the poor save? Saving and asset building in individual development accounts. New Brunswick, NJ: Transaction.
- Scholtz, J. K. (1992). A direct examination on the dividend clientele hypothesis. *Journal of Public Economics*, 49(3), 261-285.
- Shanks, T. R. W., Kim, Y., Loke, V., & Destin, M. (2010). Assets and child well-being in developed countries. *Children and Youth Services Review*, *32*(11), 1488-1496.
- Shahrabani, S. (2012). The effect of financial literacy and emotions on intent to control personal budget: A study among Israeli college students. *International Journal of Economics and Finance*, 4(9), 156-163.
- Sherraden, M. (1991). Assets and the poor: A new American welfare policy. Armonk, NY: M.E. Sharpe.
- Sonuga-Barke, E. J. S., & Webley, P. (1993). Children's saving: A study in the development of economic behaviour. East Sussex: UK.
- Sterns, H. L. (1998). The decision to retire or work. In K. W. Schaie & C. Schooler (Eds.), Impact of work on older adults (pp. 131–142). New York, NY: Springer.
- The Global Findex Database (2017). Retrieved from https://globalfindex.worldbank.org/index.php/basic-pageoverview
- Wiatrowski, W. (1993). Factors affecting retirement income. Monthly Labor Review, 116(3), 25–35.
- World Bank. 2008. Finance for all? Policies and pitfalls in expanding access. Washington, DC: World Bank.
- Yuh, Y., & Olson, P. (1997). Factors affecting the retirement fund levels of self-employed households and wage and salary households. *Family Economics and Resource Management Biennial*, *2*, 25–31.

Appendix

Annex 1. Test							
Instructions: Choose the option for your response							
a Gender:	b Age:						
c Marital statı	15:						
() Common lav		() Separated					
() Married	() Divorce	ed () Single					
d Current job	status:						
() Only study	() Work and study	() Study and looking for a job					
e Employmen	t type:						
() Permanent () Temporary							
0							
f Number of fa	amily members:						
() 1-3	() 4-6 () > 7					
gHow much d	o you earn in your jo	bb, activity or business?					
() Less than \$3		() From \$3,000.00 to \$4,999.00 MXN					
() From \$5,000).00 to \$7,999.00 MX	() From \$8,000.00 to \$12,999.00 MXN					
() From \$13,00	00.00 to \$20,000.00	MXN () Over \$20,000.00 MXN					
h IIh t							
hHow much to you spend in groceries? () Less than \$3,000.00 MXN () From \$3,000.00 to \$4,999.00 MXN							
.,		() From \$3,000.00 to \$4,999.00 MXN					
).00 to \$7,999.00 MX						
() From \$13,00	0.00 to \$20,000.00	MXN () Over \$20,000.00 MXN					
i-How much do	you spend in housir	ng and services?					
() Less than \$3	,000.00 MXN	() From \$3,000.00 to \$4,999.00 MXN					
() From \$5,000).00 to \$7,999.00 MX	XN () From \$8,000.00 to \$12,999.00 MXN					
() From \$13,00	00.00 to \$20,000.00	MXN () Over \$20,000.00 MXN					
jHow much do	o you save monthly?						
() Less than \$3	-	() From \$3,000.00 to \$4,999.00 MXN					
() From \$5,000).00 to \$7,999.00 MX	() From \$8,000.00 to \$12,999.00 MXN					
() From \$13,00	0.00 to \$20,000.00	MXN () Over \$20,000.00 MXN					

I. How do you face an unexpected event?

- () I have savings fund for such event.
- () I have insurance
- () I borrow from the bank or my family.

II. Do you have emergency fund (savings for some unexpected event)?

- () Sure, I always save a part of my income for such purpose.
- () I have savings, but not exactly as emergency fund.
- () I borrow from the bank or my family.
- () No, I find it difficult to save money.

III. You save your emergency fund in:

- () A bank, so I know my money is safe.
- () I have a moneybox where I deposit money now and then.
- () What I can save, I store it under the mattress.

IV. You use emergency fund for:

- () Attenuate the consequences of an unexpected event.
- () Occasionally, they help me reach the end of my biweekly salary period.
- () What I save, I use it to buy clothes or footwear.

V. Do you have a life insurance?

- () Yes, there are no guarantees in life.
- () No, I canceled it when I found out if I survive I will not receive money.
- () No, I have never thought about death.

VI. If you had an accident, how would you face it?

- () With the emergency fund I have.
- () With the credit card, I have it for any emergency.
- () By borrowing from family or Friends and if they don't have, from the bank.

VII. Does your car have insurance?

- () Yes, no one is exempt from an accident.
- () I had one but I didn't renew it.
- () No, it is an unnecessary expense.

VIII. Does your family know where your emergency fund is?

- () Of course, it is of the outmost importance so my loved ones are protected.
- () Only my wife, I haven't told my kids.
- () No, since they can misuse my savings.