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**Poverty as a Challenge for Intercultural Universities in
Mexico: The Case of the State of Quintana Roo and Mayan
Ethnicity**

Miguel Barrera, Yolima Olvera, Cristina Montejo and Oscar Reyes

Universidad Intercultural Maya de Quintana Roo
La Presumida, Quintana Roo, Mexico

Abstract

The intercultural college model has a major role in societies where the indigenous population is established; however, this population is typically limited in economic resources, which prevents young people to have full access to higher education. So, poverty in indigenous areas where intercultural universities are located causes that two major purposes of the intercultural college model do not exist (Casillas & Santini, 2006; Cortés & Dietz, 2015): the hodgepodge of local knowledge with scientific one-work; and let young people to have access to the labor market to improve their income and their families. In this sense, this paper intends to outline throughout a study case how the poverty situation and inequality related to the incomes are in the college community at the UIMQROO (Mayan ethnic group) in the Quintana Roo State, Mexico and how this situation puts in risk the continuity and the desired results from the Intercultural college model.

Key Words: Intercultural Education; Mexico; Poverty; Indigenous.

Introduction

The intercultural college model implemented in higher education in Mexico by the Secretary of Public Education takes into account the inclusion of indigenous young adults in the academic and work life in the country. Nevertheless, the indigenous zones are also places where a high level of poverty exists and scarcity related to the incomes and this obviously represents a big challenge for the Intercultural College model. Being facing this panorama, the Universidad Intercultural Maya de Quintana Roo (UIMQROO) has implemented the Intercultural Health College Program “which is a project aimed at knowledge, maintenance, and improvements in the health aspect inside the college community. As part of the activities, the program is carrying out a diagnostic which allows to publish which the health situation is with the students and also all the social factors that influence on the health situation. Due to this the first objective of the current project is to eradicate the aforementioned problematic” (Montejo, 2015: 2) and its main purpose was to diagnose the socioeconomic status, sexual, mental and physical health in our students so as to plan strategies that could allow a big improvement in the Intercultural model.

In the literature review, there is some evidence of prior studies where there is an analysis about different factors that cause dropping out of the school. In the Latin American context Espinoza *et al.* (2012) shows a very interesting analysis about the social factors focusing merely on families because these factors rebound on the student’s economy and this setting provokes leaving the elementary school in poor urban zones in Chile. In Mexico; for instance, Castro (2011) analyzes in a very specific way the role of the socioeconomic factors such as family separations, incomes and outcomes which are related to the dropping out of high schools in the state of Yucatan in Mexico; another relevant study which has been done in the Mexican context is the one who Valdéz *et al.* (2007) analyze if the students from the medium superior level in the state of Sonora in Mexico drop out of school due to socioeconomic factors or because they exclude themselves as part of their psychological process.

Sapelli & Torche (2004) analyze not only the dropping out which it is attributed to the economic factors, but also the authors incorporate the half-shift employment variable in order to measure the students’ low performance who work to offset their economic scarcity. Other authors such as Párama & Maya (2012) point out that the economic factor is important; however, it is not the factor which influences more related to the dropping out the school. While Espindola & Leon (2002: w/p) make a strong review based on the causes and consequences of early-school leaving which is due to the lack of economic resources since they propitiate the poverty trap: “dropping out the school creates high private and social costs”. The first ones are not that easy to estimate, but some of them are mentioned because they dispose a less competent labor force and more difficult to designate when people have not reached certain minimum levels of education to take advantages from training programs which have been offered by the state or enterprises and which the most extreme manifestation is illiteracy.

The low labor productivity and its least effect on the growth of the economies are also considered as a social cost from a low level of education which produces the early-school leaving considering the first months of the school year. Additionally, dropping out of school represents a social cost which is one of the higher costs where it is necessary to incur so as to finance social and transfer programs to different sectors which do not generate their own resources. As well, it is also mentioned that the early-school leaving costs are also part of the intergenerational reproduction of social inequalities, poverty, and its negative impact in the

social integration. These elements make the democracy strengthening and deepening difficult.” Thus, after making an exhaustive literature review, this task is very relevant because it focuses on studied units of analysis such as poverty in college students in an intercultural model.

Methodology

A simple sampling with a margin of 10% error, at the 90% confidence level, 609 students as a population size and a 50% of answer arrangement was used. The reason to use a 90% confidence level is due to the PROSIU which is a pilot program in the university and this is the motivation to bear the possible maximum error that has been suggested by authors such as Kish (1982). The sampling formula that was used:

$$n = \frac{N * z^2 * p * q}{e^2 (N-1) + (z^2 * p * q)} = 61 \text{ encues (61 questionnaires as a minimum)}$$

The PROSIU diagnostic looked into the following thematic throughout a survey:

- Sociodemographic data such as age, sex, native language, major, term, identity, community and municipality, marital status, etc.
- General data about health such as blood type, BMI, allergies, chronic diseases.
- Incomes and housing (house condition, leasing, monthly incomes, distribution of the monthly income, health costs)
- Food security and nutrition (food security at an individual level, risky eating behaviors)
- Art, physical activity and free time (attendance to artistic, cultural and sporting events and the use of free time)
- Stress, procrastination, and emotions (measuring procrastination which it means how longer the students prolong to do certain activities and tasks, stress symptoms and depression)
- Sexuality and relationships (emotional situations, sexual intercourse without protection, STD symptoms, difficulties in using condom).
- Alcohol consumption and other substances (alcohol consumption, tobacco, and other substances)
- Violence and discrimination (sexual harassment, verbal violence, psychological violence and discrimination)

To this quantitative information, certain qualitative data was added throughout the focus groups and certain topics were explored with students from the Intercultural Maya University in Quintana Roo:

- Physical health
- Mental and emotional health
- Violence and discrimination (Montejo, 2015: 3-4)

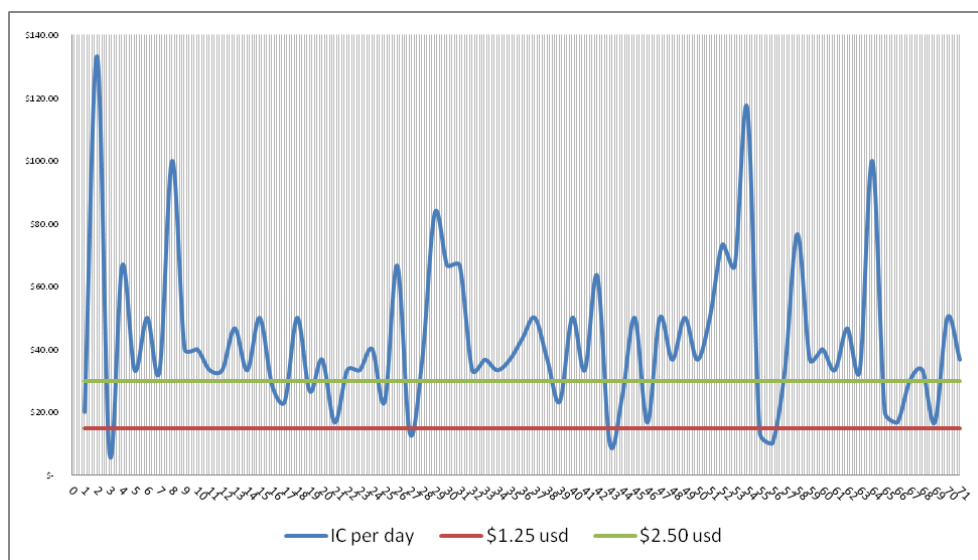
From this diagnostic, the economic variables were isolated to get information about the students' income. To do so, and as a support from other studies about the incomes in the Mayan zone from Quintana Roo, the Total Income formula (TI) was used which it was suggested by Barrera & Reyes (2014), Barrera & Reyes (2015), and Barrera, Reyes & Olvera (2015) where the total income (TI) is the sum of the Monetary Incomes (MI) and Non-Monetary Incomes (NMI):

$$TI = MI + NMI$$

Subsequently, obtaining the variable TI, the students' incomes were located against all the poverty lines which are suggested by CONEVAL in Mexico. The importance of using the poverty lines has been one of the most worn methods to measure the poverty throughout the lack of incomes since 1880 and this happened in a Royal Statistical Society conference where a proposal was amde about dividing the population in lines having in mind the salary; that is to say the families who get a certain amount of income and a certain level of employment will be "above the poverty line" (Gillie, 1996:715). The academic use of the poverty lines has been such a success that even international institutions such as World Bank has been using them in their 1990, 2000, 2005, 2008a, 2008b, 2013 and 2015 reports to define how extreme poor population can survive the day with less than \$1.25 and \$2.50 American dollars which expresses the Purchasing Power Parity (PPP). Thus, it will be analyzed if the students have the daily incomes below \$2.50 American dollars as it is proposed by the World Bank.

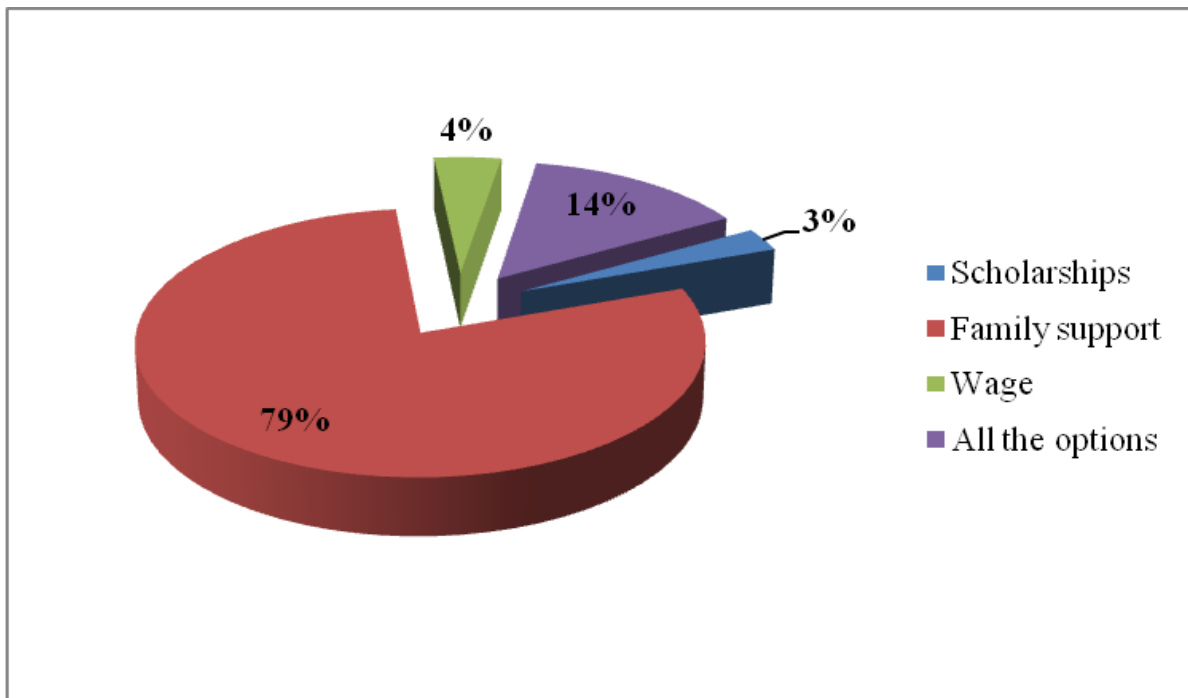
Results

As it is observed in the graph 1.17% of the sampling shows incomes below \$2.50 American dollars per day and this is considered as extreme poverty and in this way the percentage is not that high and it comes out that one-fifth of the sampling shows really unfavorable economic conditions to face the process of college education and they are in total disadvantage not only educational, but also nutritional and the environment respecting to the college partners.

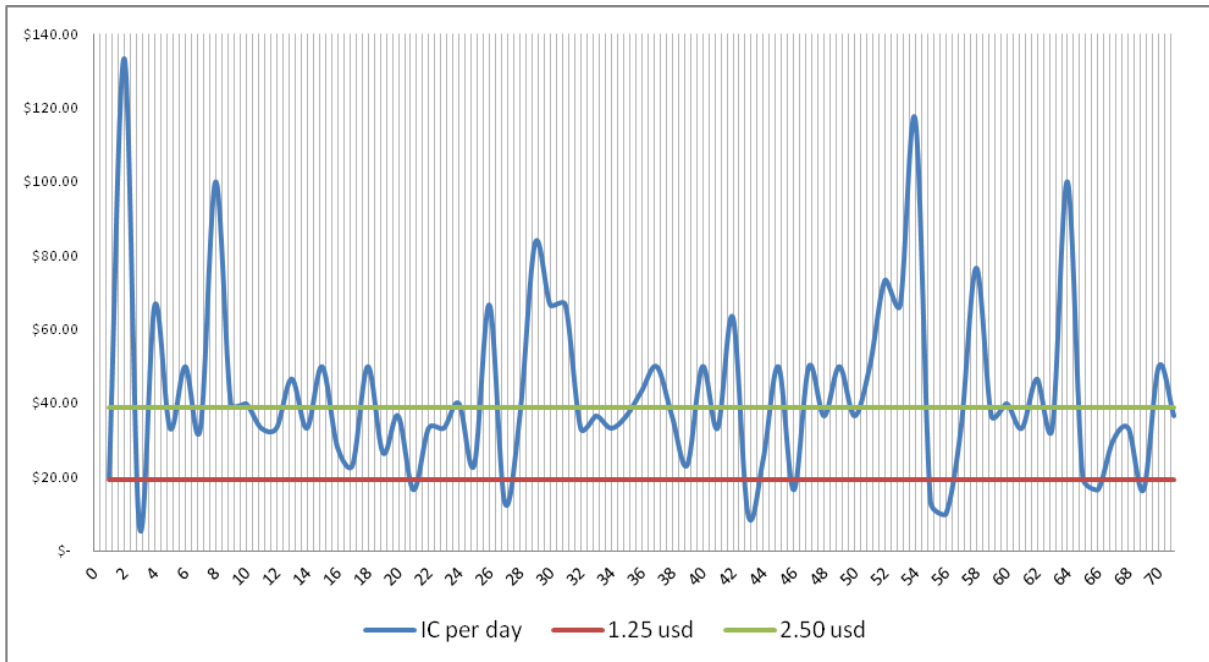


Graph 1: Daily income *per capita* in UIMQROO students versus World Bank's extreme poverty lines (2005 average exchange rate). Source: PROSIU (2015).

Now in graph 2, it can be observed the origins of all available monetary resources for all the students. In the first place, the family support is necessary, as well as scholarships and salaries and finally combinations of three options. In the graph 3, the exchange Mexican peso-American dollars from 2005 to 2015 is adjusted. With this simple change, it can be noticeable that the students' percentage which are in an extreme poverty situation up to 57.74%; it means that is more than half of the sampling.



Graph 2: Where do UIMQROO student incomes come from? Source: PROSIU (2015)



Graph 3: Daily income *per capita* in UIMQROO students *versus* World Bank extreme poverty lines (2015 average exchange rate). Source: PROSIU (201)

Conclusion

The evidence that there are students who are located in the extreme poverty line according to World Bank and this propitiates that the number of students in the Intercultural Universities in Quintana Roo and Mexico is committed. It is important to bring out that the lack of monetary resources as Espíndola & León (2002) have established is not only this problem to be solved due to the fact that the shortage of money affects in students who have bad food habits and this provokes difficulties during the learning process and they also feel discrimination for not having money. In Mexico and in a very special situation which the Mayan zone is, there are the conditioned cash transfers (Reyes & Barrera, 2015) and they alleviate a little bit the problems; however, the origins of poverty are not solved and this case of study reflects the situation perfectly well.

If the Intercultural Universities were designed based on a long period, they should need to start solving the problems that are facing, in special the ones that are talked about in this study, which condition the permanency of indigenous young students for completing and finishing all their credits in the university not only from the Quintana Roo State, but also from Mexico and Latin American. These kind of studies need to be considered by the people who are in charge of taking public decisions for a good design and complementation of the same choices.

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