

ROLE OF SAVING BASED TAKAFUL PRODUCTS IN INCREASING HIGHER EDUCATION ENROLMENT IN PAKISTAN

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Abstract

Pakistan is world's sixth most populous country with a population of more than 179.5 million (census, 2012)¹ and it is indeed a well-known fact that enrolment rate in higher education is approximately 5% which is very low as compare to the developed countries and this has not even at par when we compare it with the India, Srilanka, Bangladesh². Analyzing a few reasons gets us to a conclusion that there are some unfortunate circumstances where people do compromise on their child's education. And the ultimate result is the decline of educational status of the country. And thus the future remains gloomy. Securing child's educational future is surely every parent's first n foremost duty and responsibility. Every child of this nation deserves a big start which obviously helps him/her further in achieving major successes of his/her lifetime. After analyzing current circumstances of our country, the rise of inflation is highly recognized due to several reasons and with the passage of time, in this competitive society the significance of education has greatly amplified. Parents sometimes have to compromise on their child's interests, welfare and future because of lack of funds to pay for their education. It is a harsh reality that people still do dream about fulfilling their child's every need with expenses rising day by the day.

This study has analyses and records feedback from various people on educational future of their children. The ultimate conclusion of the study is that Saving Based Takaful products can help in providing children with a better and secure educational future. The views of the respondents clearly state the vitality of an investment plan which can be designed to provide adequate money for key educational milestones in a child's life. With the help of this study, the researchers have tried to emphasize on the fact that if people plan for their children's' education considering Shariah rules and principles, the overall enrolment rate of higher education can potentially increase.

Keywords: *Takaful, BancaTakaful*

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¹ <http://www.census.gov.pk> – Dated May 02, 2012

² UNESCO UIS (institute of Statistics), "Statistics In Brief For India, Sri Lanka, Bangladesh & Pakistan", 2007. (<http://stats.uis.unesco.org/unesco>)

Introduction

Takaful³ is a noun stemming from the Arabic verb "Kafal" which means which means guarantee or responsibility or more generally "taking care of one's needs".

Thus, the word Takaful means shared responsibility, shared-guarantee, collective assurance and mutual undertakings. Islamic insurance acknowledges the concept of mutual protection and shared responsibility which was also seen under the Arab tribal custom in the practices of paying blood money (diyah). This was accepted into Islamic practice on the verdict of the Prophet (PBUH). It therefore portrays the sincerity and willingness of the group to help and assist anyone among them in times of need. "Takaful" possesses many similarities to co-operative or mutual insurance.

As mentioned in the Qur'an

"And help one another in righteousness and piety and do not help one another in evil deeds and enmity"⁴

Takaful is based on shared responsibility, shared-guarantee, collective assurance and mutual undertakings. In takaful; there are contributors instead of policyholders, who participate jointly in a fund for their mutual benefit. They are owners of the fund and the takaful company manages the fund on their behalf. Thus, if the company makes a profit this is shared between the contributors, and if any of the contributors were to suffer financial loss they are paid from the takaful fund.

Takaful can also be defined as... a system based on solidarity peace of mind and mutual protection which provides mutual financial and other forms of aid to Members {of the group} in case of specific need whereby Members mutually agree to contribute monies to support this common goal"⁵

Takaful saving plan is also a good tool to enhance wealth as wealth plays an important role in human life. Wealth has always been a vital part of a human's life through which he can enjoy all the luxuries of life. Wealth is a subject matter of trade and any business dealings such as sales, leasing etc. Not importantly money but properties like houses, cars or even lands are different forms of wealth which a person earns either through inheritance or of course by striving hard⁶. Allah (swt) has mentioned in the holy Quran "That man can have nothing but he strives for" (53:39)⁷

³ Asmatullah, "Takaful kee Sharai Haisyat", Idaratul Ma'arif Karachi, 2009. p 72.

⁴ Al Quran, Surah-Al-Maida : (5:2)

⁵ Fisher, O. "Takaful Markets & products", A Training Reference Manual, Unicorn Investment Bank, Bahrain. 2008.

⁶ Billah, M. M. "Islamic Wealth Management & World View". 2008. p 1.

www.takaful.coop/doc_store/takaful/WealthMgt.doc

⁷ Al Quran, Surah-Al-Najm: (53:39)

Normally Wealth planning comprises of five parts:

- Investment planning
- Tax planning
- Retirement planning
- Estate planning; and
- Education planning

Education plan is becoming more necessary as cost of education increases. There are benefits in tax and estate planning by properly planning for education. The earlier the start the better it is for the education plan.⁸

There are several financial instruments that are acceptable in Shariah rules and principles for wealth management. Some are as follow:

- Deposits: examples are current accounts, saving accounts, term deposits etc.
- Investment
- Islamic Mutual funds
- BancaTakaful

The Bank Insurance / Takaful Model ('BIM'), also sometimes known as 'Bancassurance / Banca Takaful', is the term used to describe the partnership or relationship between a bank (Conventional Bank / Islamic Bank) and an insurance company whereby the insurance company uses the bank sales channel in order to sell insurance / Takaful products.

BIM allows the insurance / Takaful Company to maintain smaller direct sales teams as their products are sold through the bank to bank customers by bank staff. Bank staff and tellers, rather than an insurance / Takaful salesperson, become the point of sale / point of contact for the customer. Bank staff are advised and supported by the insurance / Takaful Company through product information, marketing campaigns and sales training. Both the bank and insurance / Takaful Company share the commission. Insurance policies are processed and administered by the insurance company. BIM differs from 'Classic' or Traditional Insurance Model (TIM) in that TIM insurance companies tend to have larger insurance sales teams and generally work with brokers and third party agents. (Wikipedia)⁹

There are several needs in which product BancaTakaful can be helpful, for example:

- Wedding
- Life plan
- Education

⁸ Abdul Razak, S. H. "Wealth Planning and Management". 2007.

⁹ <http://en.wikipedia.org/wiki/Bancassurance>

This research focuses on what role can a Bank play in increasing the education level at the Tertiary level by bringing in Education based Takaful products in the market. This research focuses on the Tertiary level as the cost of education at Tertiary levels is high which means that the Bank may come across sufficient funding need on individual basis. Due to lack of resources, the researchers could not conduct research on a random sample. More than three-fourth of the sample included respondents from a limited number of organizations; this resulted in a large majority of the respondents in the privately employed segment falling in the >40,000 salary range. Most people in this salary range usually have considerable amount of monthly savings and explicitly or tacitly consider themselves to be secure when it comes to the education of their children. Thus they do not as such find a need for education financing solutions.

There is a representation bias in the sample. Due to the sampling procedure adopted, the respondents cannot be used to represent the whole 30 to 35 year old population. Almost all respondents in the privately employed category were well-educated and highly-paid, which is not true for a large part of the target population.

Research Methodology

For the research, a questionnaire has been designed keeping in mind the hypothesis and research objectives of the research. The questionnaire comprises of 25 questions and research will be carried out in a one on one session as many questions are of subjective nature as well. The questionnaire will be tabulated and responses will be analyzed to prove the hypothesis outlined in the section above.

The Target market for the research includes the following:

- Male
- Adult
- Married, and With children who are less than 12

The following research hypotheses will be proven to determine the need for Education based Takaful and savings products for funding Tertiary education. For this purpose researcher have tabulated and analyzed responses from 400 respondents which seek to provide answers to the following formulated hypotheses

The reason for choosing this target market is that Males normally make financial decisions in their families being the main bread winner. Moreover, a married person who has children is more inclined to plan for his family's well-being as compared to a person who has no responsibilities whatsoever.

Research Hypothesis

1. People plan for their children's higher education.
 - This Hypothesis aims to prove that people consider education as priority item amongst other expenditure and reserve their disposable income on periodic basis to save for their children's higher education expected in 10-15 years' time.
2. If people had money they would invest in long term savings and Takaful plan to provide for their children's higher education.
 - This hypotheses aims to prove that non availability of disposable funds is the reason people do not plan for their children's education. People with disposable income will plan to provide higher education to their children.
3. Enrollment rate at Post Graduate/University level will increase if people are provided with Education based banking products.
 - We seek to prove that there is a need as well as acceptance of Education based products to fund tertiary level education. Moreover, there is a preference for Islamic based education products as compared to conventional products.
4. People will prefer Takaful based Education products as compared to Insurance based Education products.
 - We seek to prove that people of Pakistan hold on to their religious beliefs when given a choice between a shariah compliant and a non shariah compliant products to satisfy their financial needs.

Literature Review

Present Scenario of Education System in Pakistan

Education plays a very vital role in the development of a country and a direct correlation has been found between education level of a nation and its prosperity in terms of economic, social and political well-being. Education raises the productivity and efficiency of individuals and thus produces skilled manpower that is capable of leading the economy towards the path of sustainable development. It is sad but true that the situation of the education sector in Pakistan is not very encouraging¹⁰. At this point we will discuss some of the key indicators related to Pakistan's Education sector. Please note that as the major studies used for literature review in this regard were conducted in 2009, hence the key indicators mentioned in the literature review are for the corresponding period as well.

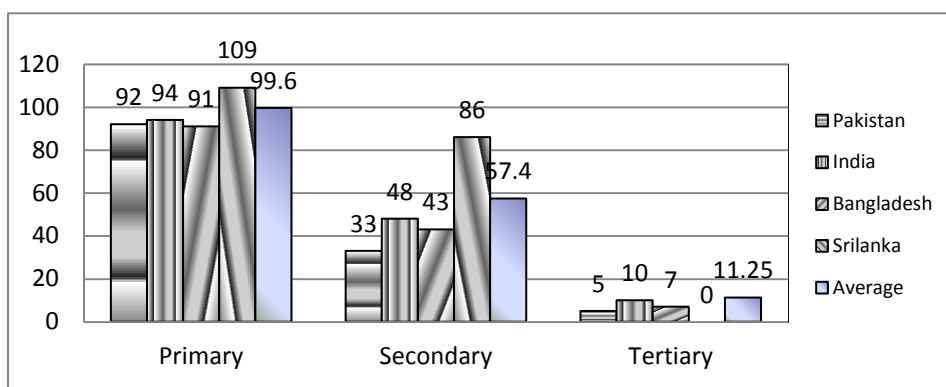
¹⁰ Akram, M. & Khan, F. J. "Public provision of Education and Government spending in Pakistan", Pakistan Institute of Development Economics (PIDE). 2007. Working paper 40.

Low Enrollment Rate

In addition to wide disparities between regions and gender, lack of trained teachers, deficiency of proper teaching materials and poor physical infrastructure of schools, the most alarming situation in Pakistan is the drastic decrease in the enrollment level as one goes up the education level.

TABLE 1-GER% -Comparison of South Asian Countries¹¹

2007 GER%	Primary	Secondary	Tertiary
Pakistan	92	33	5
India	94	48	10
Bangladesh	91	43	7
Sri Lanka	109	86	0
Average	99.6	57.4	11.25



* India figures are of year 2002

As per the graph above, Pakistan has a Gross enrollment rate of 92% at the Primary level which means that 92% of the pupils that are of the age that is represented by primary level are enrolled at primary level. This is the lowest as per the region's average of almost 100%. The enrollment rate drops drastically to 33% at secondary level and a mere 5% at Tertiary level which hints to a high dropout rate at secondary and Tertiary level. Enrollment rate of a mere 5% at Tertiary level means that around 95% of the eligible population at Tertiary level does not go to college or university. This low enrollment rate at Tertiary level has resulted in non-availability of specialists in fields of medicine, engineering and science and technology. There can be various reasons for such low enrollment rates at different levels of education as follows:

¹¹ UNESCO UIS (institute of Statistics), "Statistics In Brief for India, Sri Lanka, Bangladesh & Pakistan", 2007. (<http://stats.uis.unesco.org/unesco>)

EXHIBIT 1-Major barriers to education at different education levels

Level	Possible Major Constraints ¹²
Primary	Lack of or poor perception of quality of education and utility of education. Religious reservations about education in schools and focus on Quranic education Focus on occupational skills learning rather than schooling Presence of labor based occupations and lack of professional occupations Control of landlords/power in few hands Cultural constraints to let females study and they comprise of majority of population Lack of and unwillingness of teachers to teach in rural, suburban areas Lack of availability of schools due to funds constraints Lack of Books and stationery Lack of availability of transport services to reach schools Funds available for basic needs only
Secondary	Lack of or poor perception of quality of education and utility of education. Lack of and unwillingness of teachers to teach in rural, suburban areas Lack of availability of Middle level schools and colleges due to funds constraints Lack of availability of transport services to reach schools Too many dependents and pressure to work rather than study Funds available for basic needs only Presence of labor based occupations and lack of professional occupations
Tertiary	Lack of universities Lack of funds to relocate to urban areas where most of the universities are located Too much of competition for seats in universities due to few universities Lack of funds to afford graduate or postgraduate studies

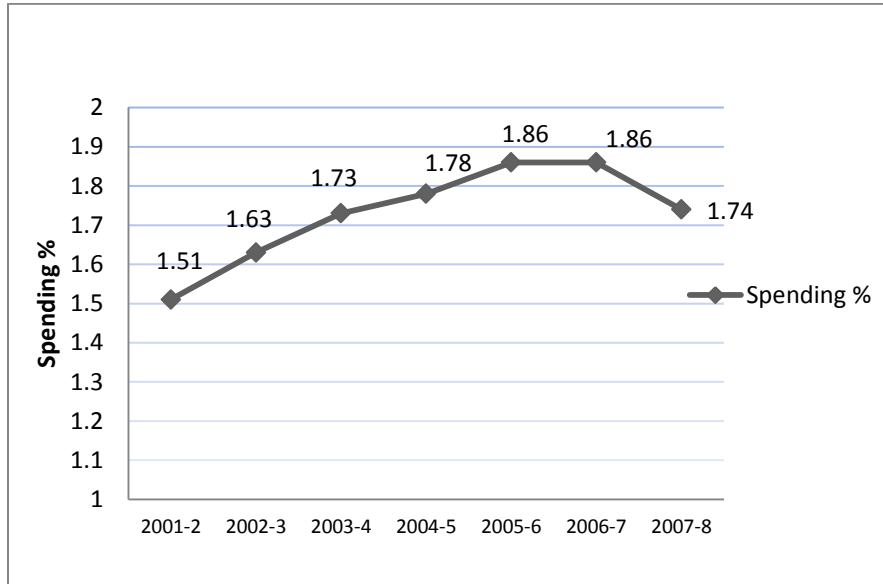
Government Spending on Education

Like other social sectors, education is not a priority area of the Pakistani government as is represented by the low % of education spending to the GDP of Pakistan. The spending on education has actually dropped from 1.86% to 1.74% in the fiscal year 2007-8.

¹² Memon, G. R.. "Education in Pakistan: The Key Issues, Problems and The New Challenges" Department of Education, University of Karachi, Journal of Management and Social Sciences. 2007. Vol. 3, No. 1,

TABLE 2-Government spending on Education as % of GDP ¹³

Year	2001-2	2002-3	2003-4	2004-5	2005-6	2006-7	2007-8
Spending %	1.51	1.63	1.73	1.78	1.86	1.86	1.74



Britain's £77 million expenditure for the year 2007-8, was about six per cent of its GDP and exceeded by more than twice the £32 billion assigned to the defense of this once mighty world power. Japan, the second-largest world economy also spends about 10 per cent of its national budget for education-related facilities and has a nine-year system of compulsory education. Last year, about 242 billion were awarded as an operating capital to its 93 universities to revitalize their creativity in international competition.

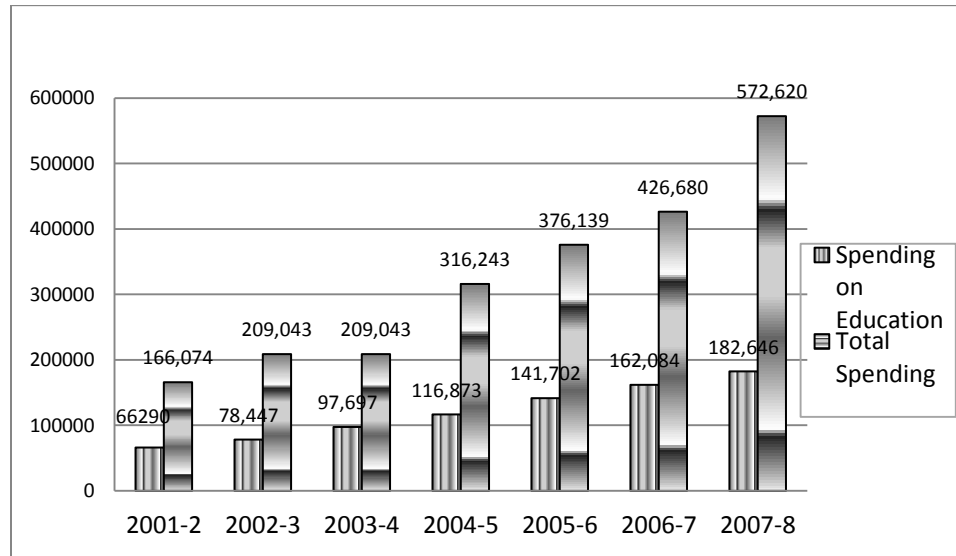
The percentage of GDP given to education by some other vibrant industrial economies such as 5.91 per cent by Australia, 6.285 by Canada, 7.38 per cent by Denmark and 6.01 per cent by France is also illustrative. These inputs, interestingly, do not include the expenditure incurred on research, training and development in other manufacturing and technological sectors¹⁴.

¹³ Ministry of Finance, "Poverty Reduction Strategy Paper: Annual Progress Report FY 2007-08". http://www.finance.gov.pk/poverty/poverty_PRSP_progress.aspx

¹⁴ Habib, S. "Imperatives of increased investment in education". 2009.

TABLE 3- Spending on Education vs Total Spending¹⁵

Year	2001-2	2002-3	2003-4	2004-5	2005-6	2006-7	2007-8
Spending on Education	66290	78,447	97,697	116,873	141,702	162,084	182,646
Total Spending	166,074	209,043	209,043	316,243	376,139	426,680	572,620
% of Spending	40%	38%	47%	37%	38%		38%



Education has always been the biggest receiver of spending from the PRSP (Poverty reduction strategy paper-pro poor expenditure). However, the % of spending on education of the total amount spent on poverty reduction factors including Roads, highways & bridges, water supply, health, population planning, law and order, housing, food support etc. has decreased considerably from 47% in 2003-4 to 32% in 2007-8.

¹⁵ Ministry of Finance, "Poverty Reduction Strategy Paper: Annual Progress Report FY 2007-08".
http://www.finance.gov.pk/poverty/poverty_PRSP_progress.aspx

Exhibit 2: Clause on Education in Islamic Constitution of Pakistan¹⁶

The 1973 constitution of the Islamic Republic of Pakistan recognizes the importance of education and says that the state shall:

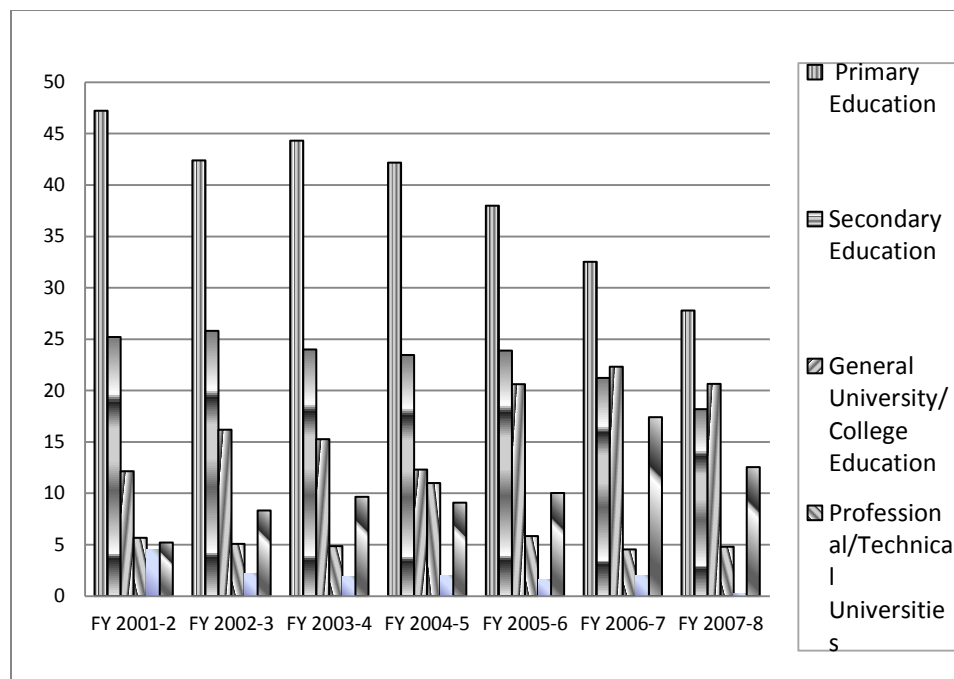
- (i) Promote unity and observance of the Islamic moral standards;
- (ii) Promote with special care the educational and economic interests of backward areas;
- (iii) Remove illiteracy and provide free and compulsory secondary education within minimum possible period;
- (iv) Make technical and professional education generally available and higher education equally accessible to all on the basis of merit;
- (v) Enable the people of different areas, through education, training, agriculture and industrial development, and other methods to participate fully in all form of national activities including employment in the services of Pakistan; and
- (vi) Ensure full participation of women in all the spheres of national life

TABLE 4-% of education spending on different levels of education¹⁷

Year	2001-2	2002-3	2003-4	2004-5	2005-6	2006-7	2007-8
Primary Education	47.23	42.4	44.32	42.18	37.99	32.53	27.79
Secondary Education	25.21	25.81	24	23.46	23.89	21.23	18.19
General University/College Education	12.15	16.19	15.27	12.31	20.62	22.32	20.65
Professional/Technical Universities	5.67	5.08	4.86	11	5.84	4.54	4.8
Teacher and Vocational Training	4.54	2.18	1.88	1.97	1.62	1.97	0.24
Other Educational Institutions	5.21	8.33	9.66	9.09	10.03	17.41	12.55

¹⁶ Akram, M. & Khan, F. J. "Public provision of Education and Government spending in Pakistan", Pakistan Institute of Development Economics (PIDE). 2007. Working paper 40.

¹⁷ Ministry of Finance, "Poverty Reduction Strategy Paper: Annual Progress Report FY 2007-08".
http://www.finance.gov.pk/poverty/poverty_PRSP_progress.aspx



As per the graph above, education spending at Tertiary level i.e. College/universities/professional and technical universities has increased considerably from 2001-2 to 2007-8. However, the enrollment rate at Tertiary level in Pakistan is still the lowest in the region. The Govt. is renewed its focus from Primary to Tertiary level education over time and it is a matter of time when we will see considerable conversion of primary and secondary students making their way up the education level.

Currently, the government bailout package from the IMF of \$7.6 Billion has resulted in increased pressure on the developmental spending on education as the government has committed to the International Monetary Fund (IMF) to reduce the fiscal deficit from 7.4 % of GDP in 2007-8 financial year to 4.2% in the current fiscal year¹⁸. The government has actually taken the following actions directly affecting the education sector:

- Education sector has faced cuts of Rs. 30 billion out of the total Rs. 79.5 billion proposed cuts in PSDP allocation to reduce fiscal deficit.
- **Funding for the higher education sector has been cut by 73 per cent. Officials have attributed lack of cash and economic slowdown for the huge cut.** The government will now spend only Rs114billion, instead of the previously allocated Rs412 billion for executing 600 projects.

¹⁸ Shafique, K. "Budget Cuts for Higher Education: A Sad State of Affairs", STEP (Science, technology and Education in Pakistan). 2009.

<http://www.nextstepforward.net>

- Government has directed the HEC to abolish a project worth Rs160 billion under which four new engineering universities were to be set up in the country.
- The science and technology sub- sector appears to be the hardest hit; its funding will be reduced by Rs10.6 billion
- Deep cuts have also been made for the information and communication technology sub-sector; it will get Rs34.9 billion less than the allocated Rs60 billion for executing 118 projects¹⁹.

Hypothesis Testing

Hypothesis # 1: People plan for their children's higher education

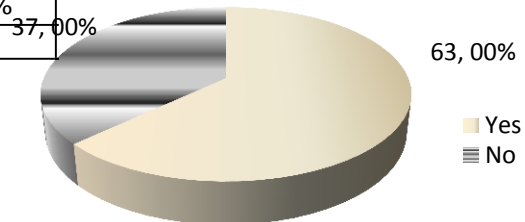
Ho: People plan for their children's higher education

H1: People not plan for their children's higher education

Distribution of Responses to Education Planning of Sample

Responses of Education Planning

	Frequency	%
Yes	252	63.00%
No	148	37.00%
Total	400	



Null hypothesis p = 63%

Alternate Hypothesis p0 = 60%

 n = 400

0.05

¹⁹ Khan,S.B. "Higher education spending cut by 73 percent". 2009.

Level of Significance

Tail = 2

$$\text{Test Statistics } z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}}$$

Calculated Value = 1.225

Tabulated Value = -1.96

Decision Accept

Level of Significance: 95% Confidence Interval

For our calculation we have assumed that at least 60% of our sample should plan for their children's higher education, Otherwise it would be assumed that the people living in Pakistan are not plan of their children's higher education.

Since the Calculated Value falls in the acceptance region, therefore at the 5% significance level we don't have enough data to reject the hypothesis that people plan for their children's higher education. Therefore we will accept the Hypothesis.

Hypothesis Testing # 2: If people had money they would invest in long term savings and Takaful plan to provide for their children's higher education.

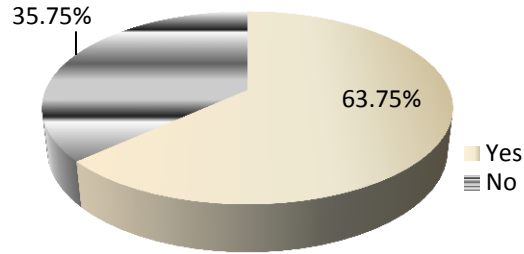
Ho: If people had money they would invest in long term savings and Takaful plan to provide for their children's higher education.

H1: If people had money still they would not invest in long term savings and Takaful plan to provide for their children's higher education People not plan for their children's higher education

Distribution of dependence of education of children on finances

Distribution of dependence of education on finance

	Frequency	%
Yes	255	63.75%
No	143	35.75%
Total	400	



Null hypothesis $p = 64\%$
 Alternate Hypothesis $p_0 = 60\%$
 $n = 400$

Level of Significance 0.05
 Tail $= 2$

Test Statistics
$$z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}}$$

Calculated Value $= 1.633$

Tabulated Value $= -1.96$

Decision Accept

Level of Significance: 95% Confidence Interval

For our calculation we have assumed that at least 60% of our sample invest money for their children's higher education, otherwise it would be assumed that the people living in Pakistan are not invest in long term savings and Takaful plan.

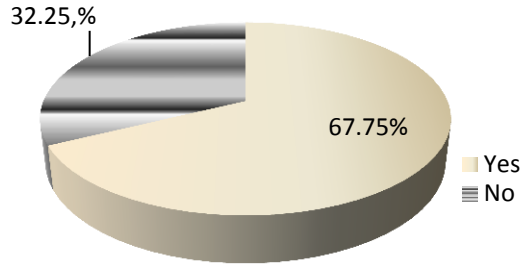
Since the Calculated Value falls in the acceptance region, therefore at the 5% significance level we don't have enough data to reject that, if people had money they would invest in long term savings and Takaful plan to provide their children's higher education. Therefore we will accept the Hypothesis.

Hypothesis # 3: Enrollment rate at Post Graduate/University level will increase if people are provided with Education based banking products.

Distribution of Availability of Funds

	Frequency	%
Yes	271	67.75 %
No	129	32.25 %
Total	400	

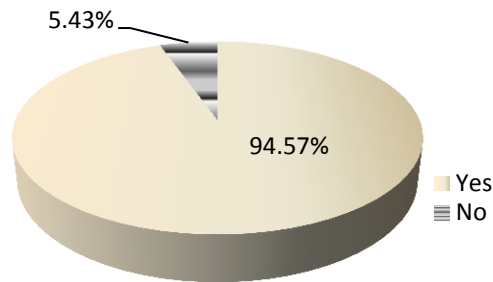
Distribution of Availability of Funds



Distribution of people Investment options availed by sample

	Frequency	%
Yes	122	94.57 %
No	7	5.43%
Total	129	

Distribution of people interested in banking solution



We have already proven that the low enrollment rate at graduate and post graduate education is also due to lack of finances to fund education costs. We can therefore presume that if people avail education based products, then the funding gap can be reduced to an extent that the enrollment can be increased at the graduate and post graduate levels. As per our primary research, 68% of respondents felt that they will be having the necessary funds to provide for their children's education while around 32% felt they won't be having them.

Out of these 32% respondents, an astounding 94.57% of the people who had not planned for their children's education said they will be interested in a Banking solution to help them arrange funds for their children's graduate and post graduate education.

Hypothesis # 4: People will prefer Takaful based Education products as compared to Insurance based Education products.

We seek to prove that people of Pakistan hold on to their religious beliefs when given a choice between a Shariah compliant and a non Shariah compliant products to satisfy their financial needs.

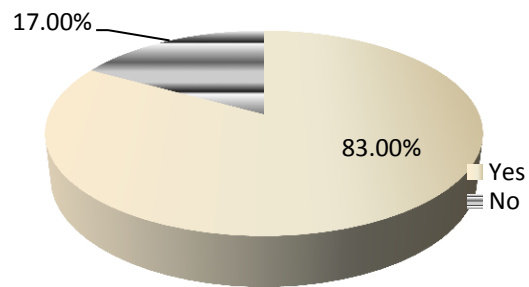
Ho: People will prefer Takaful based Education products as compared to Insurance based Education products

H1: People will not prefer Takaful based Education products as compared to Insurance based Education products.

Distribution of preference for Islamic solutions

	Frequenc y	%
Yes	332	83.00 %
No	68	17.00 %
Tota l	400	

Distribution of preference for Islamic solutions



Null hypothesis $p = 83\%$

Alternate Hypothesis $p_0 = 85\%$

$n = 400$

Level of Significance 0.05

Tail $= 2$

Test Statistics
$$z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}}$$

Calculated Value = -1.120

Tabulated Value = -1.96

Decision Accept

Level of Significance: 95% Confidence Interval

For our calculation we have assumed that at least 85% of our sample will prefer Takaful based Education products as compared to Insurance based Education products, Otherwise it would be assumed that the people living in Pakistan will not prefer Takaful based Education products as compared to Insurance based Education products.

Since the Calculated Value falls in the acceptance region, therefore at the 5% significance level we don't have enough data to reject that people will prefer Takaful based Education products as compared to Insurance based Education products. Therefore we will accept the Hypothesis.

Conclusions

From the above result we conclude that

- People do plan for their children's education. Individual with many children and with disposable income have the tendency to plan ahead for their children's education.
- People of lower income groups consider their decision to educate their children at higher levels dependent on availability of funds. Moreover, people in higher income brackets and hence with higher disposable income can spare more funds to invest in savings plan to provide for the future education needs of their children.
- People with low income group consider availability of finances as one of the major factors in their decision to send their children for higher education.
- People who are not prepared to finance their children's education will avail Education based products if provided which will increase the enrollment at graduate and post graduate education in return.
- People who had previous investment avenues will also look into the possibility of investing in Takaful and savings product as most of the other modes of investment do not protect against financial insecurity due to untimely death of respondents.

- People of Pakistan are driven by their religious beliefs while making financial decisions and given a choice they will always prefer Islamic products over conventional ones.

Recommendation

Since the formation of Higher Education Commission (HEC), a large number of post graduate students benefited by the donations provided to them by HEC to pursue their higher education. However, since the year 2008, the economic downturn in Pakistan has created a negative impact on the funding of HEC by the government, which in turn dried down the funding by HEC to students to pursue higher education.

Keeping in view the present economic scenario and the findings of this research, it is recommended that the government should arrange awareness program for promotion of Takaful based saving products at mass level. This will help the people realize about a new avenue of savings through which they can utilize their own savings to fund for their children's higher education. The government should also take an initiative to include Takaful based saving plans as an incentive for its employees so that they can help their children get best of education in future. These steps can also be taken by the private sector organizations. In this manner, there will be more awareness amongst the citizens regarding savings based Takaful product as a result the people of Pakistan will be able to plan for their children's higher education in a proactive and Shariah compliant way.