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# Potential Benefits Of Cryptocurrencies And The Perception Of Educated Youth Of Balochistan Pakistan Towards Cryptocurrencies: A Comparative Study Between Teachers And Students Of Balochistan, Pakistan

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**Abstract**

Cryptocurrencies have highly influenced global financial markets. They require greater attention from academicians and policymakers as they have a larger impact on the economy. The purpose of this study is to investigate the perception of students and the teachers of Balochistan Pakistan about cryptocurrencies. Teachers are the main players in generating knowledge and creating awareness among the masses regarding new technological advancements and the students are the present or potential users of cryptocurrencies. A pilot study was conducted at the universities of Quetta, in the Balochistan province of Pakistan, where a sample of 100 participants was selected and 78 complete responses were received.

The results of the study satisfied all the formulated hypotheses where it proved that perception was significantly dependent upon knowledge of cryptocurrencies, the intangibility of the cryptocurrencies, the field of study containing business and non-business teachers and students, and the lack of government regulations regarding cryptocurrencies. The practical usefulness of the study is that gathered information will help examine the economic and financial literacy of the respondents and their preferences for the use of innovative financial instruments

## 1. Introduction:

Crypto currencies such as Ethereum, Bitcoin and others are digital currencies where the most famous one; Bitcoin was first developed by a mysterious person or group with the pseudonymous name “Satoshi Nakamoto” which is today’s leading cryptocurrency and has hiked to a price of 64000$ in May 2021 and is currently holding its value above 60000$ as of October 2021 (singh, 2021). The cryptocurrency market is growing rapidly, and these digital assets are gaining popularity all around the world. Most

monetary institutions and governments disapproved or rejected such digital currencies at the dawn of these commodities but as of today several countries have made these currencies legal tender and have allowed payments made or received in digital currencies, even their central banks have made their digital currencies, to regulate the use of digital currencies.

Cryptocurrencies have become a mode of exchange that is free from bias, not controlled by any central authority and there is a fixed or limited supply of these currencies. Cryptocurrencies, mainly bitcoin have earned the status of deflationary coins or currencies these are not affected by any kind of inflation. Cryptocurrencies are a hot topic today; almost every person having access to the internet has heard of it in a way or another or the concept has crossed their social media feeds or news notifications.

In Pakistan Wakar Zaqa television host, activist, and crypto entrepreneur is working in favor of cryptocurrency investment and regulations in Pakistan regarding Crypto laws and accepting of Bitcoins and making it legal and easy for the Pakistani population so that they can get all the perceived benefits of this technology. The province of Punjab and Sindh have already removed any kind of ban from it. Federal Board of Revenue and State Bank of Pakistan have released notifications about cryptocurrencies to warn about these currencies however, they are not currently strictly stopping or banning cryptos.

The concept of digital currencies was first introduced in 1980 AD. David Chaum a cryptographer proposed the idea of a currency supported by proof-of-work computer algorithms opposite of central bank systems. (Satoshi, 2017). Chaum found Digi cash and was adopted very much in the beginning but eventually failed due to several reasons, US's e-gold was a much closer concept to bitcoin, however, was a centralized system and had a non-fixed supply hence this made it much different from bitcoin. (Satoshi, 2017)

Laszlo Hanyecz was the first person who made a real-world transaction using bitcoins he bought two pizzas for 10000BTC in Jacksonville Florida in May 2010 (Franco P. , 2014). In August 2010, the first major Bitcoin hacking incident occurred (Sharma & Sharma, 2018). The hackers used vulnerabilities in the Bitcoin verification system to generate 184 billion Bitcoins. This caused the value of Bitcoin to drop sharply for the first time. This subsequently led the government to investigate possible money laundering using Bitcoin. The initial panic did not last long: In November 2010, the market capitalization of Bitcoin reached $ 1 million for the first time. (Berentsen & Schär, 2018)

In January 2011, Bitcoin received much coverage for the first time it was mostly because of a darknet site known as silk road which was dealing with illegal activities drugs, and stolen credit cards (Satoshi, 2017). It was estimated that at its peak 50% of bitcoin transactions were carried on Silkroad all due to its anonymity it became the favorite among Silkroad users. In February the market price of bitcoin reached $1 and by July it hiked up to $31. In March 2013 the market capitalization of bitcoin was $1

billion. July 2016 was marked as the second "halving day" in Bitcoins history as the mining reward of 1 block was halved into 12.5 bitcoins and the next halving was in the year 2020. In the year 2017 bitcoin reached its highest value of 20000$ and this value eventually fell back to 1500$ by march 2020 (Satoshi, 2017). In the year 2020 bitcoin prices struggled a lot and the market was completely "Bearish" (a term used to refer to the slow working of the market and low prices). The year 2021 was a breakthrough the market was "Bullish" (a term used to refer to the climbing prices of cryptocurrencies) the prices of every cryptocurrency hiked the price of bitcoin reached as high as 64000$.

Elon Musk a billionaire and an entrepreneur was one of the biggest influences on crypto prices in 2021, his tweet on social media Twitter about accepting bitcoins as a payment for his tesla cars, hiked the prices of bitcoin and other coins in March 2021, and on the 13th of May 2021, he retweeted about not accepting bitcoins started the dip of bitcoin (Carlson, et al., 2021). Currently, bitcoin is holding its value above 44000$ as of august 2021.

Viewing the importance and evolution of cryptocurrencies, Cryptocurrencies have become a mode of exchange and are increasingly becoming popular among the world economies including Pakistan. People of Pakistan are now considering the crypto market as a safe mode of investment however, many are still unaware of how the market works and what are the potential benefits associated with it.

This paper sheds light on blockchain technology and how digital coins which are anonymous and decentralized are easy and cheap to transfer and have a high degree of security and privacy are used and the potential advantages or risks of investing in such currencies. The purpose of this study is to understand the perception of the university students of Balochistan Pakistan about cryptocurrencies and how could they enter the crypto market and benefit from cryptocurrencies.

Since the concept of cryptocurrencies has been evolved, several studies have been conducted on cryptocurrencies in many countries of the world, however, in Pakistan, there are limited number of studies on this topic and the perception of students who are the future investors of the nation and teachers who are knowledge builders is still vague, Hence, this study proves to be a source of knowledge to the people of Pakistan, enabling them understand the mechanism of cryptocurrencies and their potential as an investment opportunity in Pakistan.

This study attempts to find that how people of Pakistan can enter the crypto market and by utilizing these currencies how they could safeguard the value of their money from inflation and potentially earn money by investing in these coins. If the government of Pakistan regulates these commodities; the public, in general, can generate revenue, thus increasing the welfare of the public and the GDP of Pakistan mainly focusing on the province of Balochistan enabling them to improve their livelihood.

This study also brings into awareness several economic benefits of the crypto currencies to the country. The system of Hawala can collapse if the use of cryptocurrencies increases among the public, as the crypto market has relatively low risks, very low

prices, are easy to use and very fast, and open 24/7. This can help in bringing down the Illegal Hawala system in Pakistan since the population of Pakistan is very diverse, many of our relatives live in our neighboring countries hence, the sending and receiving of money through proper channels is very costly therefore, people rely heavily on the Hawala system. Viewing this, the overall economy of Pakistan can seriously benefit from cryptocurrencies, the unemployed and educated youth can invest and earn from the crypto market. This stud attempt to explore that how much knowledge do the students and teachers have and what is their perception about the usability and security of digital currencies and are they willing to invest in these coins; knowing the potential risks and gains these currencies can have.

### 1.1. Objectives of the study:

1.1.1. To find out the potential benefits cryptocurrency investing, or mining could have on the economy of Balochistan and Pakistan.

1.1.2. To find out the perception of students and teachers at various Universities of Quetta Pakistan regarding the crypto market.

1.1.3. To raise awareness about this mode of technology and digital currencies.

## 2. Literature review:

Several definitions of cryptocurrencies exist however, the common thing in all of the existing definitions is that it is a type of currency that has some value and can be bought or exchanged with fiat money or for some other asset and it allows the transmission of that value between nodes on a network (Guttmann, 2014).

Cryptography is a method of protecting information and communication by using code so that only the intended object of the information can read and process it. The prefix "crypt" means "hidden" or "vault", and the suffix "spelling" means "writing" (Franco P. , 2015). There are currently two specific networks of cryptocurrencies that are mostly known and used, Bitcoin network and Ethereum network. (Quest, 2018). Every person having access to the network or using it has a copy of the transaction through blockchains technology. Blockchains are a way of storing and recording data or information which are not easy to manipulate, hack, change or deceive the system in any way. It is an open-source ledger that records the data and simultaneously sends this data to every node of a network. There are four main types of blockchains: private, public, consortium, and hybrid blockchains. Blockchains use cryptography to save data in form of blocks called hashes (euromoney, 2021). The transactional value could be of any amount. For bitcoin, it could be as small as 100 millionths of one bitcoin also known as 1 Satoshi named in honor of its developer (Quest, 2018).

There are hundreds of cryptocurrency exchanges that allow users to buy, sell and invest in cryptocurrencies. Fiat currency or cryptocurrencies can be used to buy or sell upon these exchanges. (Guttmann, 2014). Some of the most known exchanges are Binance, Coinbase exchange, Huobi Global, Kraken and KuCoin. There exchanges offer many possible benefits of cryptocurrencies like user anonymity, deflationary characteristics however, at the same time, there is also a negative side to these

currencies like everything in this world nothing is completely good or completely bad. Cryptocurrencies offer several benefits which attract the investors such as user anonymity and transparency as these are not controlled by any central authority and the users are free to use their money without any monitoring authority (Sharma & Sharma, 2018). Exchange dealing in crypto offer Peer-to-peer crypto network where only sender and the receiver of coins are involved in the transaction without involvement of any middle authority ( (Bunjaku, Trajkovska, & Kacarski, 2019). Another benefit of cryptocurrencies is that there is no possibility of inflation in the system because of nonexistence of any political power or company in hold of these currencies (Bunjaku, Trajkovska, & Kacarski, 2019). When sending money from bank to bank; a handsome amount of fee is charged as fee and taxes which is even higher in case of foreign transactions however, crypto exchanges charge very minimal amount of fee or mostly are free in P2P transactions (Abderahman, Rejeb, & Keogh, 2021).

Despite the benefits offered; there are several problems associated with cryptocurrencies among which the biggest one their inherent volatility. Cryptocurrency has no direct connection to any tangible or intangible asset because is inherently volatile as their price depends on the concept of supply and demand (Cunha, Rupino, Melo, & Sebast, 2021). Converting funds into cryptocurrencies can also be a form of money laundering and terrorist financing. In fact, unlike traditional currencies controlled by central and regulated institutions, cryptocurrency has a high potential for illegal activities. The anonymity of cryptocurrencies highly attracts illegal activities terrorist fundings and money laundering (Bholane, 2021). The history of cryptocurrency is not free from cyber-attack attempts to exploit the anonymity of users on the current network to try to influence the behavior of the network for malicious purposes. Although proof of work makes the mining process more resistant to some of these threats, hackers can attack any user or the network itself. (Bunjaku, Trajkovska, & Kacarski, 2019).

There are hardly any regulations on cryptocurrencies; many countries are trying to introduce their regulated digital currencies; however, the free crypto market is unregulated and is prone to illegal use and all this deregulation makes it very much risky (Bilal, 2021). Being an Islamic state, Pakistan follows Islamic guidelines; where Islamic laws and rulings have a great influence on the way of life and major policies of the coutnry are also highly dependent on sharia law. Asif, (2018) in his article about "The Halal and Haram Aspects of cryptocurrencies in Islam" has concluded that the cryptocurrency ecosystem consists of Halal and Haram elements. When analyzing any digital currency or token, one should look at different aspects from the perspective of technology and religion. Technically, consensus protocols must be logically deconstructed to assess whether they conform to Islamic teachings. Currently, the author believes that the Proof of Work (PoW) protocol is Halal, and the Proof of Game (PoS) protocol is Haram. Religiously, Riba, Gharar, and Maysir prohibitions must be verified in every transaction or investment.

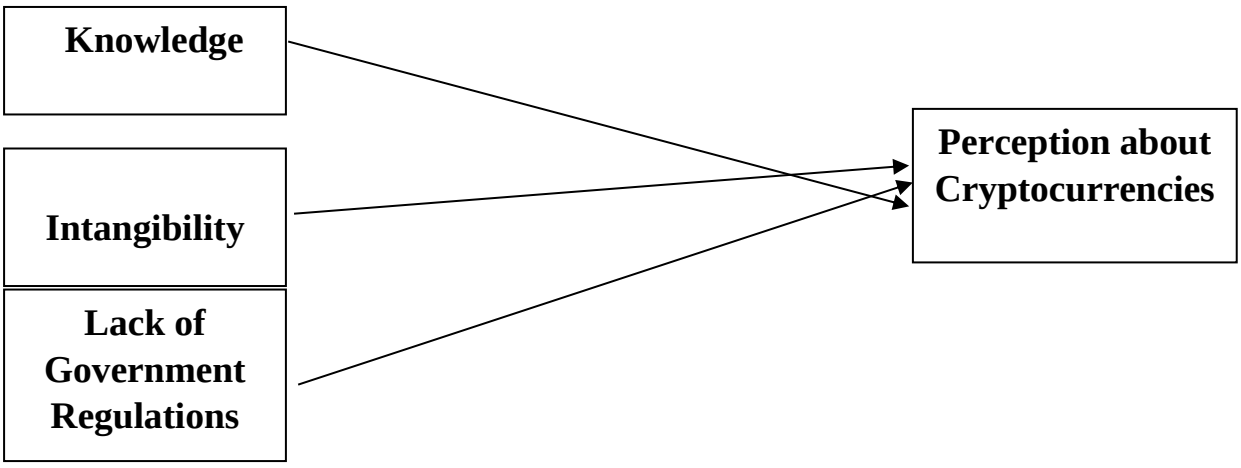
Cryptocurrencies offer any economic benefits to the countries where they are legalized. These economic benefits could be many for Pakistan if the Pakistani government

regulates cryptocurrencies. Since there is no online banking system in Pakistan to transfer international currencies, like PayPal and because of country's reputation in the international market, investors do not want to invest in Pakistan. Due to the unavailability of these services, there are also many obstacles faced by Freelancing individuals in Pakistan. There are many talents in Pakistan through online self-employment to earn money and reduce unemployment. This problem can be solved by legalizing cryptocurrency in Pakistan because international currency transactions will be easier and do not require any third-party services. It is also positive that it will affect country's' image, in the international market, showing its willingness to accept new technologies. It will also help people to buy a variety of services and make international transactions through cryptocurrency transactions because they cannot do fiat currency transactions easily, so cryptocurrencies will solve this problem as well. In addition, it will also affect Pakistan's economy, because when people earn money from other countries and use it in Pakistan, it results in a current account surplus and the economy will grow gradually (Afzal , Ayesha , & Asif, 2019). Based on these opinions; adopting cryptocurrencies as a legalized currency could bring many opportunities to grow for the masses and economy in general. In order to get benefited from these opportunities, Government of Pakistan needs not only to focus on the legalization of the cryptocurrencies but also make its people knowledgeable about the cryptocurrencies. In order to know the perception of people who are the knowledge providers (teachers) and the potential investors (students) needs to be aware about the crypto market and view them as an investment opportunity. This study intends to find out the perception of students and teachers at universities of Balochistan Pakistan towards cryptocurrencies and the factors which influence their perception regarding the cryptocurrencies and shape their opinion in viewing these as an option for investment.

## 3. Hypothesis of the Study:

**H1:** Knowledge of the crypto market has an impact on the perception of cryptocurrency.
**H2:** The intangibility of cryptocurrencies has an impact on the perception of cryptocurrency.
**H3:** Lack of government regulations on cryptocurrencies has an impact on perception about cryptocurrencies.

## 4. Conceptual Framework:




## 5. Research Methodology:

The research aims to find out the perception of university students and teachers of Quetta about cryptocurrencies. The reason for including students and teachers in the study is that they are the members of society who are mostly connected with the recent research and the various financial instruments and modes of investment are being taught in the university level degrees in different departments to the students.

The study is quantitative where the survey method is used to quantify the description of the perception of participants.

For this study, primary data is collected through questionnaires which are distributed among the faculty and students to know their perception of cryptocurrencies.

Primary data are raw or new data used particularly for new research where the research topic has no or relatively fewer data available for use.

There are two variables one being independent while the other is dependent, the independent variable is the knowledge of students and teachers regarding the crypto market, the intangibility of the cryptocurrencies, and the lack of government regulations on the crypto market and field of study of students and teachers including business and non-business. All these variables have a potential impact on the dependent variable which is the perception of the students and teachers regarding cryptocurrencies. Data for the above-mentioned variable is collected by a questionnaire which is adopted from (shukla & A, 2019).

The above variables can be mentioned through the following econometric equation:

$$Y = \alpha + \beta_1 \text{Knowledge} + \beta_2 \text{Intangibility} + \beta_3 \text{Lack of Government Regulations} + \beta_4 \text{ Field of Study} + \mu \qquad (1)$$

In the above equation (1) Y is the dependent variable Perception for students in one case and teachers in the other, α is the intercept and the related βetas are the coefficients for related variables and μ is the error term.

The population of the study contains all the university level students and teachers of Balochistan, however, due to several constraints a sample of a minimum of 100 individuals was selected randomly including students/alumni and teachers from two

major universities of Quetta city. A simple random sampling method is used to collect the data from the students and teachers. Initially, 100 questionnaires were distributed among the participants out of which 80 turned back, among these 78 were filled. The responses from teachers were 23 and 50 responses were from students.

Statistical package for social sciences (SPSS) 25 is used to analyze the collected data and provide results using the data collected from the questionnaires.

For statistical analysis, regression is used to find out the effect of the independent variables on the dependent variable. Along with that analysis of variances and descriptive statistics are used to compare the results among teachers and students.

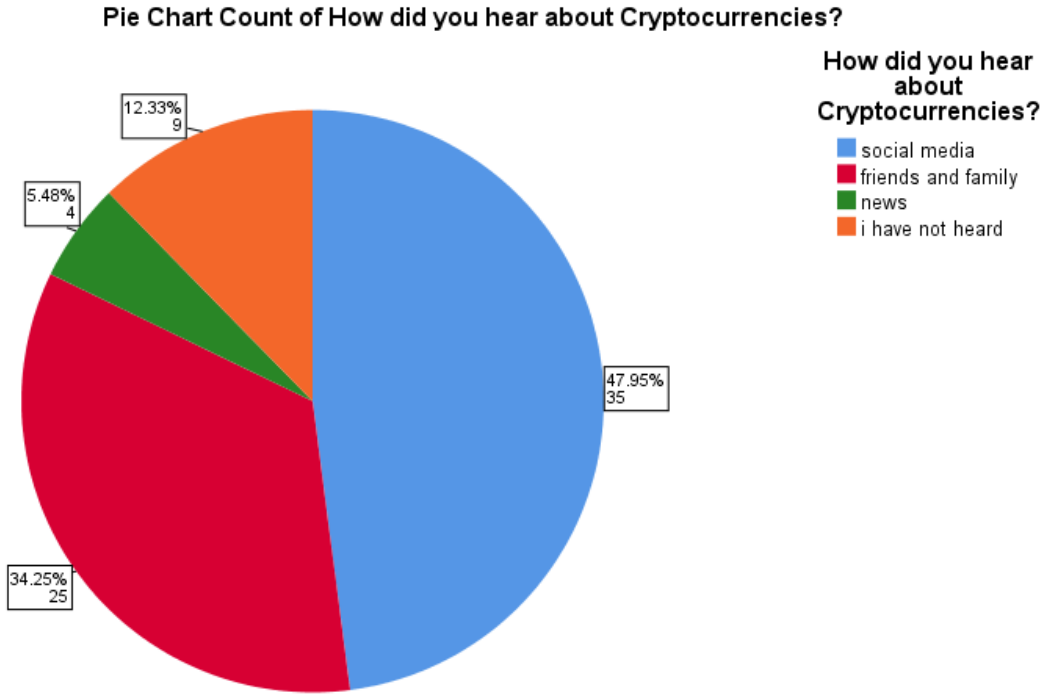
## 6. Results and Discussion:

The study contains a dependent variable perception of students and teachers and the independent variables Knowledge of cryptocurrencies, the intangibility of cryptocurrencies, and the lack of government regulations in legalizing the cryptocurrencies which are expressed from the following econometric equation.

$$Y = \alpha + \beta_1 \text{Knowledge} + \beta_2 \text{Intangibility} + \beta_3 \text{Lack of Government Regulations} + \beta_4 \text{ Field of Sudy} + \mu$$

The data for the above equation were analyzed using SPSS 25 and the results along with the discussion are reported below.

The participate of the study were asked about the source form where they got to know about the cryptocurrencies. The answers were obtained on a predetermined scale containing options such as social media, friends and family, news and not heard yet. The response of the participants is shown from the following pie chart.



The chart above indicates that the around 47.95% of participants heard about cryptocurrencies from social media including YouTube, WhatsApp, fakebook, Instagram and others. Among which YouTube advertisements were the mostly rated source of crypto knowledge. The 35. 25% of participants got the knowledge from friend and family, 5.48% from news and around 12% selected that they have not heard about it.

These results indicate that social media as emerging heavily now adays has been a greater source of building knowledge among masses regarding cryptocurrencies.

**Table 1: Table showing the results of Model Summary for Students Perception.**

**Model Summary[a]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .995[b] | .990 | .989 | .03968 |

a. Occupation = Student

b. Predictors: (Constant), Field of study (Department), Intangibility, Knowledge, Lack of Government regulations

In the table above, model summary is reported for a single unit of study that is students. The value of R is 0.995 which shows a high positive relationship between the dependent variable students' perception about cryptocurrencies and the independent variables namely Knowledge, intangibility, lack of government regulations and the field of study. The value obtained indicates the high relationship between the variables of the study. The value of R square is 0.990 or 99% which shows that the dependent variable perception of students towards cryptocurrencies is affected 99% by the independent variables.

**Table 2: Table showing the coefficients analysis for Students Perception.**

**Coefficients[a,b]**

| Model | | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|---|
| | | B | Std. Error | Beta | t | Sig. |
| 1 | (Constant) | .010 | .037 | | .282 | .779 |
| | Knowledge | .785 | .016 | .768 | 47.848 | .000 |
| | Lack of Government regulations | .145 | .016 | .247 | 9.194 | .000 |
| | Intangibility | .125 | .018 | .183 | 6.809 | .000 |
| | Field of study (Department) | .027 | .012 | .035 | 2.267 | .028 |

a. Occupation = Student

b. Dependent Variable: Perception

In table 2 the coefficient analysis of dependent variable students' perception and the independent variables knowledge, level of education, intangibility, lack of government regulations and the field of study are reported. The slope Knowledge has a significant P value of 0.000 lower than 0.01, showing that knowledge has a significant impact on the students' perception about cryptocurrencies. The related beta value for knowledge is 0.785 indicating that if the value of knowledge changes by 1, it will bring a 0.010+ 0.785 change in the perception of students.
The regression equation for this relationship is as follows:

$$\text{Sudents}'\text{Perception} = 0.010 + 0.785\ \text{Knowledge}$$

In the third row of the table, the second slope of the study government regulation is reported, which has a significant t value of 9.194 significant at 1%. This shows that the lack of government regulation has a significant impact on the perception of students about cryptocurrencies The beta value of 0.145 describes that if government regulation changes by 1 then students' perception will change by 0.010+ 0.145.
The regression equation for this relationship is as follows:

$$\text{Sudents}'\text{Perception} = 0.010 + 0.145\ \text{Lack of Government regulations}$$

Intangibility characteristic of cryptocurrencies also has a significant t value of 6.809 showing the significant impact of intangibility on students' perception. The coefficient beta value of 0.125 shows that if intangibility changes by 1 then student's' perception will change by 0.010+ 0.125.

The regression equation is as follows:

$$\text{Sudents}'\text{Perception} = 0.010 + 0.125\ \text{Intangibility}$$

The study includes another variable which is field of study containing business and non-business where students and teachers from both business and non- business field of studies are included in the study. The variable has a beta value of 0.027 and t value of 2.267 significant at 5 % (P value of 0.028). This shows that field of study has a significant impact on perception of students about cryptocurrencies. In other words, students with a background of business studies have a different perception about cryptocurrencies than those who are from other nonbusiness fields.

Thus, the overall modal will be as below:

$$\begin{aligned}\text{Students}'\text{Perception} &= 0.010 + 0.785\ \text{Knowledge} \\ &+ 0.145\ \text{LAck of Government Regulations} + 0.125\ \text{Intangibility} \\ &+ 0.027\ \text{Filed of study} + e\end{aligned}$$

**Table 3: Table showing the Analysis of Variance ANOVA for students Perception**

**ANOVA[a,b]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 7.006 | 4 | 1.752 | 1112.246 | .000[c] |
| | Residual | .071 | 45 | .002 | | |
| | Total | 7.077 | 49 | | | |

a. Occupation = Student

b. Dependent Variable: Perception

c. Predictors: (Constant), Field of study (Department), Intangibility, Knowledge, Lack of Government regulations

The table 3 states the results of analysis of variance. ANOVA is used to check that whether the model is acceptable or not. The F value in the table above is statistically significant with the P value of 0.000 < 0.01, showing that the model is completely acceptable, and the variations caused in the model are not by chance.

**Table 4: Table showing correlation among variables**

**Correlations[a]**

| | | Field of study (Department) | Knowledge | Lack of Government regulations | Intangibility | Perception |
|---|---|---|---|---|---|---|
| Field of study (Department) | Pearson Correlation | 1 | .115 | .109 | -.049 | .141 |
| | Sig. (2-tailed) | | .427 | .452 | .737 | .328 |
| | N | 50 | 50 | 50 | 50 | 50 |
| Knowledge | Pearson Correlation | .115 | 1 | .336* | .337* | .917** |
| | Sig. (2-tailed) | .427 | | .017 | .017 | .000 |
| | N | 50 | 50 | 50 | 50 | 50 |
| Lack of Government regulations | Pearson Correlation | .109 | .336* | 1 | .817** | .659** |
| | Sig. (2-tailed) | .452 | .017 | | .000 | .000 |
| | N | 50 | 50 | 50 | 50 | 50 |
| Intangibility | Pearson Correlation | -.049 | .337* | .817** | 1 | .642** |
| | Sig. (2-tailed) | .737 | .017 | .000 | | .000 |
| | N | 50 | 50 | 50 | 50 | 50 |
| Perception | Pearson Correlation | .141 | .917** | .659** | .642** | 1 |
| | Sig. (2-tailed) | .328 | .000 | .000 | .000 | |
| | N | 50 | 50 | 50 | 50 | 50 |

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

a. Occupation = Student

The table above shows the correlation among variables. The values of Pearson correlation of all the variables lie between -1 and +1. The value for field of study is 0.141, for Knowledge is 0.917, for Intangibility is 0.642 and for government regulations is 0.659 which are all between -1 and +1 showing that there exists a relationship among all the variables of the model. Furthermore, the P value is significant at 5% for all the variables except field of study.

**Table 5 : Table showing the Model Summary for Teachers Perception**

**Model Summary[a]**

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|
| 1 | .998[b] | .995 | .994 | .03309 |

a. Occupation = Teacher
b. Predictors: (Constant), Field of study (Department), Lack of Government regulations, Knowledge, Intangibility

In table 4 above, model summary is reported for another unit of study teachers.
The value of R is 0.999 which shows a high positive relationship between the dependent variable teachers' perception about cryptocurrencies and the independent variables Knowledge, intangibility, lack of government regulations and the field of study. The value obtained implies the high relationship between the variables of the study. The value of R square is 0.995 or 99% which shows that the dependent variable perception of teachers towards cryptocurrencies is affected 99% by the independent variables.

**Table 6: Table showing the coefficients analysis for Teachers' Perception.**

**Coefficients[a,b]**

| Model | | Unstandardized Coefficients B | Unstandardized Coefficients Std. Error | Standardized Coefficients Beta | t | Sig. |
|---|---|---|---|---|---|---|
| 1 | (Constant) | .064 | .037 | | 1.704 | .106 |
| | Knowledge | .780 | .021 | .745 | 37.899 | .000 |
| | Lack of Government regulations | .165 | .022 | .233 | 7.542 | .000 |
| | Intangibility | .124 | .024 | .170 | 5.259 | .000 |
| | Field of study (Department) | -.018 | .017 | -.021 | -1.056 | .305 |

a. Occupation = Teacher
b. Dependent Variable: Perception

Table 5 reports the coefficient analysis of dependent variable teachers' perception and the independent variables knowledge, level of education, intangibility, lack of government regulations and the field of study. The slope Knowledge has a significant

P value of 0.000 lower than 0.01, showing that knowledge of cryptocurrencies has a significant impact on the teachers' perception about cryptocurrencies. The related beta value for knowledge is 0.780 indicating that if the value of knowledge changes by 1, it will bring a 0.064+ 0.780 change in the perception of teachers.
The regression equation for this relationship is as follows:

$$\text{Teachers}'\text{Perception} = 0.064 + 0.780\ \text{Knowledge}$$

After knowledge the second slope of the study government regulation is reported in the table above, which has an significant t value of 7.542 significant at 1%. This shows that the lack of government regulation has a significant impact on the perception of teachers about cryptocurrencies The beta value of 0.165 describes that if lack of government regulation changes by 1 then teachers' perception will change by 0.064+ 0.165.
The regression equation is as follows:

$$\text{Teachers}'\text{Perception} = 0.064 + 0.165\ \text{Lack of Government regulations}$$

Intangibility characteristic of cryptocurrencies also has a significant t value of 5.259 showing the significant impact of intangibility on perception of teachers. The coefficient beta value of 0.124 shows that if intangibility changes by 1 then the perception will change by 0.064+ 0.124.

The regression equation is as follows:

$$\text{Teachers}'\text{Perception} = 0.064 + 0.124\ \text{Intangibility}$$

The study includes another variable which is field of study containing business and non-business where students and teachers from both business and non- business field of studies are included in the study. The variable has a negative beta value of -0.018 and t value of -1.056 which is insignificant at 5% (P value of 0.305). This shows that field of study does not have a significant impact on perception of teachers about cryptocurrencies. This may be due to the fact that teachers have a wider knowledge and exposure of subjects whether they belong form any particular area or filed. They are not bound to their respective fields for being aware about the cryptocurrencies.

Thus, the overall model will be as below:

$$\begin{aligned}\text{Teachers}'\text{Perception} &= 0.064 + 0.780\ \text{Knowledge} + 0.165\ \text{Government Regulations} \\ &+ 0.124\ \text{Intangibili} - 0.018\ \text{Filed of study} + e\end{aligned}$$

**Table 7: Table showing the Analysis of Variance ANOVA for Teachers Perception**

**ANOVA[a,b]**

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 4.096 | 4 | 1.024 | 935.320 | .000[c] |
| | Residual | .020 | 18 | .001 | | |
| | Total | 4.115 | 22 | | | |

a. Occupation = Teacher

b. Dependent Variable: Perception

c. Predictors: (Constant), Field of study (Department), Lack of Government regulations, Knowledge, Intangibility

The table above states the results of analysis of variance. ANOVA is used to check that whether the fitness of the model. The F value in the table above is statistically significant with the P value of 0.000 < 0.01, showing that the model is completely acceptable, and the variations caused in the model are not by chance.

**Table 8: Table showing correlation among variables**

**Correlations[a]**

| | | Field of study (Department) | Knowledge | Lack of Government regulations | Intangibility | Perception |
|---|---|---|---|---|---|---|
| Field of study (Department) | Pearson Correlation | 1 | .330 | .309 | .494* | .381 |
| | Sig. (2-tailed) | | .125 | .151 | .016 | .073 |
| | N | 23 | 23 | 23 | 23 | 23 |
| Knowledge | Pearson Correlation | .330 | 1 | .531** | .486* | .945** |
| | Sig. (2-tailed) | .125 | | .009 | .019 | .000 |
| | N | 23 | 23 | 23 | 23 | 23 |
| Lack of Government regulations | Pearson Correlation | .309 | .531** | 1 | .826** | .763** |
| | Sig. (2-tailed) | .151 | .009 | | .000 | .000 |
| | N | 23 | 23 | 23 | 23 | 23 |
| Intangibility | Pearson Correlation | .494* | .486* | .826** | 1 | .714** |
| | Sig. (2-tailed) | .016 | .019 | .000 | | .000 |
| | N | 23 | 23 | 23 | 23 | 23 |
| Perception | Pearson Correlation | .381 | .945** | .763** | .714** | 1 |
| | Sig. (2-tailed) | .073 | .000 | .000 | .000 | |
| | N | 23 | 23 | 23 | 23 | 23 |

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

a. Occupation = Teacher

Table 8 above indicates the correlation among variables. The values of the Pearson correlation of all the variables lie between -1 and +1. The value for the field of study is 0.381, for Knowledge is 0.945, for Intangibility is 0.714 and for government regulations is 0.763 which are all between -1 and +1 showing that there exists a relationship among

all the variables of the model. Furthermore, the P value is significant at 5% for all the variables except for the field of study.

## 7. Conclusion and Recommendations:

This study is intended to find out the perception of the people of Balochistan Pakistan about cryptocurrencies by viewing the effects of Knowledge, the intangible nature of cryptocurrencies, and the effect of the lack of government regulations.

The results show that all the independent variables namely knowledge of cryptocurrencies, the intangibility of cryptocurrencies, and lack of government regulations affect the dependent variable which is the perception of students and the teachers of Balochistan. The lack of government regulation has quite the impact on the perception where government intervening has shown a positive change in perception. These results are consistent with those of (Mnif, Emna, Jarboui, & Mouakhar, 2020).

The results show that the student's perception of cryptocurrencies varies with their field of study while in the case of teachers, the field of study is not an important factor in shaping the perception. This is due to the fact that business students are more knowledgeable about cryptocurrencies than non-business students because they study these currencies as a mode of investment in their study courses however, teachers are not bounded to their field for being aware of cryptocurrencies it is because teachers have a wider knowledge and exposure of subjects whether they belong form any particular area or filed and they are not bound to their respective fields for being aware of the cryptocurrencies.

The study has theoretical and practical implications such as it contributes to the literature on factors affecting the perception of Balochistan's students and teachers regarding cryptocurrencies.

The practical implications of the study could help in revenue generation for Pakistan and the self-employment of the people of Balochistan. It also brings the attention of marketers towards social media marketing of exchanges dealing in cryptocurrencies as they are the major source of creating awareness among the masses regarding the crypto market.

The study has future recommendations for the students and other researchers to search for more factors that have an impact on cryptocurrency perception such as the influence of billionaire entities, social media apps, induction of crypto buying and purchasing options, and crypto buying and selling options related to regular fiat currency banks as by allowing such transactions; what impact could it have on the perception of people by taking different data samples and using different methods of analysis.

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