



FINANCIAL LITERACY AWARENESS ON CRYPTOCURRENCY AMONGST WOMEN TEACHING FRATERNITY IN CHENNAI

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Abstract

Cryptocurrency, the digital or virtual currency is gaining prevalence in the Indian economy in recent years steadily surging on the crypto adoption rate phenomenally. The Finder's Cryptocurrency Adoption Index report dated Nov 2022 that measured the growth of cryptocurrencies worldwide through an ongoing survey of internet users in 26 countries finds that, India has the highest number of crypto owners in the world with 27.45 crore accounts, of whom 60% are men and 40% are women. Previous research studies also show that, despite the regulatory uncertainty and confusion regarding policies affecting cryptocurrency, India's crypto adoption rate has continued to grow rapidly, signaling strong growth in interest and acceptance of crypto especially among the female users. In this paper we explore the socio demographic preferences for the cryptocurrency awareness of the women; in particular the women teaching fraternity from the city of Chennai. The study reveals that, 77% of the women teachers are aware of the term cryptocurrency. The four socio demographic variables viz Age group, Nature of Employment, Place of College Education and Net Salary show the significant relationship with the cryptocurrency awareness level of the women teachers; while other variables like, their educational level, educational stream and place of school education do not show the level of significance statistically.

Keywords: *Cryptocurrency, women teachers, crypto awareness, financial literacy.*

Introduction:

Cryptocurrency, though it is novel concept incepted in late 2009 but gaining importance nowadays for both extreme reasons. On the one side we read in news articles that the rate of growth of Cryptocurrency is unimaginable. The cost of a bitcoin was about \$0.008 – \$0.08 in 2009 during its launch but as on Jan 2023 it costs about \$21,000USD. In India, the

crypto exchange has recently registered a rise of 3500% in the transaction volume and touched 14 million users as well, motivating many individuals and institutions that includes some public corporations to invest more on this platform. Since they are decentralized without any government regulations, there are many tax heaven countries like Venezuela had grabbed this opportunity to

have more USD pumping into the country to grow its GDP. While on the other side, there are also various news reports in the digital and social media citing the devastating loss of many individuals' crypto coins. For example, in November 2022, a crypto warning from The Ontario Teachers' Pension Plan in the aftermath of the collapse of FTX, the multi-billion-dollar cryptocurrency exchange, it was announced that the Ontario Teachers' Pension Plan could lose up to \$95 million from its investments in both the US and International FTX entities.

Need for Study:

The cryptocurrency bill titled, "Draft Banning of Cryptocurrency & Regulation of Official Digital Currency Bill, 2019 - Ministry: Finance, GoI"^[21] to be tabled in Indian parliament soon in the background of Finance bill-2022 which imposed a 30% tax on the income generated through crypto investment. At the same time, the number of crypto owners as a percentage of the total population, India stood at the fifth spot at 7.30% meaning the use of Cryptocurrency is steadily increasing and has provoked a variety of discussions in India. If we look at international experience on cryptocurrencies, the world too is distinctly divided. To quote; Bill Gates and Al Gore opine that cryptocurrencies will increase the storage value of money, while on the other end of the spectrum, vehement opposition comes from Warren Buffett and Paul Krugman referring to cryptocurrency as a Ponzi scheme and a vehicle for criminal activity. In continuation, looking through the gender lens, we see women have been under-represented in the cryptocurrency industry due to a combination of reasons. But, having women involved in cryptocurrency can help to address the gender gap in the technology industry and can help to promote inclusivity in the cryptocurrency community. It will also give them greater control over their

financial assets and provide with more opportunities for investment and financial independence. All these necessitate deciphering more on the concept on cryptocurrency and its awareness amidst people. In this paper, we evaluate the seven socio demographic factors and their relationship with significance level on the cryptocurrency awareness of the women teachers.

Review of Literature:

(A Jaya Suriya et al., 2022)^[3] study shows that 87.1% of people have heard about cryptocurrency and 52.9% of the people do not have cryptocurrency; 80% of the people believe that cryptocurrency will be higher in value in the next 5 years; 42.9% of the people are likely to invest in cryptocurrency in the future. (Maryam Yousefi Nejad et al, 2022)^[5] this study looked into the social factors that affected young working individuals' understanding of cryptocurrencies and identified that all of individuals have similar awareness on cryptocurrency irrespective of their gender, occupation, age, education level, and field of study.

(S.Vetrichelvi,A R Shanmuga Priya, 2022)^[7] study was conducted to verify the influence of awareness on adoption of cryptocurrency affirmed that adoption on any new technology is basically influenced by awareness and awareness is the basic element to make people use the technology; It added that, usually the awareness level on cryptocurrency is high with students and youngsters who easily adopt technology. (Raja Kumar et al, 2022)^[8] This study aimed to look at college students' perceptions about cryptocurrencies and its future in India summarized that 91.74 % are aware of cryptocurrency whereas 8.26 % are still not aware about the cryptocurrency. From the study population 73.39% agreed cryptocurrency has a future in India and only 8.40 % agreed it'll be useful in future.

(Charles Guandaru Kamau, 2022) ^[4] noted that the level of participation in cryptocurrencies among the Kenyan youth is significantly lower than the level of awareness. This means that, although many are aware of the existence of cryptocurrencies in Kenya, only a few have started engaging in the business. **(Zühal Yurtsizoglu & Kerim Ali Akgül, 2022)** this study noted that the sports sciences students' level of cryptocurrency's awareness was found to be moderate. But on the contrary, the crypto currency system became an investment tool and was even adopted as a national currency in many nations; In the sports industry too as in Atletico Madrid, cryptocurrency is accepted as a payment system;

(Alexis Henshaw, 2022) It had held out that the prospects Cryptocurrencies to lowering the financial barriers and empowering women & poor. It also looked at, as how Cryptocurrencies fit into the neoliberal tradition by utilizing neoliberal notions of entrepreneurship, financial inclusion, and gender roles. **(Kim, Kyoung Tae, 2022)** ^[9] examined the association between investment literacy and cryptocurrency investment and shown that objective investment literacy was negatively while subjective literacy was positively associated with holding cryptocurrency.

(Anu Bala, 2022) ^[6] Discussed about the legal status of Cryptocurrency in India and observed that currently there is no legislation that bans cryptocurrency as illegal, but govt is planning to introduce a bill called "Regulation of official digital currency bill 2021". **(Premendra Kashid and Purshottam Patil, 2022)** acknowledges that, though India has the greatest percentage of cryptocurrency owners in the world and it ranked fifth overall; the study points out that the cryptocurrency market in India is at the nascent stage and devoid of adequate research in the academic field due to the

lack of awareness of opportunities, drawbacks and challenges of the cryptocurrency across people.

(Fred Steinmetz et al, 2021) ^[15] They found that Cryptocurrency users tend to be young, male, well-educated and well-off and 62% of the respondents' state that their ownership is mediated by trust rather than the knowledge about cryptocurrencies. **(Aman Kumar Yadav, 2021)** the author attempts to trace the development of cryptocurrency in India and seeks to comprehend India's position on cryptocurrencies as a new digital currency known as a "Central Bank Digital Currency" by RBI similar to Tunisia's eDinar and digital Yuan from China.

(Swapnil Yashwant Dhanawde, 2021) This study examines the necessity for laws in cryptocurrency setups and appreciate the fact that more and more businesses are beginning to accept payment in cryptocurrencies. **(Najma Yasmeen et al, 2021)** they recognized that the personal qualities have a big impact on the adoption and awareness of cryptocurrencies; and also perceived benefits and risks associated with the use of cryptocurrencies moderates the relationship between cryptocurrency awareness and its adoption.

(Haidong Zhao & Lini Zhang, 2021) This study found that while both financial literacy and investment experience were positively associated with investing in cryptocurrencies, investment experience was more influential in cryptocurrency investment. **(SamiullahJahan Shaikh, 2021)** It observed that there was a growth in the market cap of Cryptocurrency after the demonetization and there is a growing interest among the urban respondents in their willingness to adapt cryptocurrencies as an alternative payment option especially when Tesla accepted Bitcoins.

(Panos, Georgios A. et al, 2020) ^[16] This study examines the financial literacy exerts a statistically significant negative impact on the probability of owning cryptocurrency. Financially literate

individuals are also more likely to have no intention of owning cryptocurrencies but are moderated by the financial risk involved in cryptocurrency. (**L PRAVEENA, 2020**) The study concluded that the Cryptocurrency has potential to replace the traditional monetary system in India by creating a secure network of currency exchange and this can help India to reach to the next platform of E-commerce.

(**Christina Bannier et al, 2019**) they demonstrated that women are less knowledgeable than males on the features of the cryptocurrency variety Bitcoin and the socio-demographic factors and personality traits only partially account for this disparity. (**Mark P. Doblaz, 2019**) This study determined that, the attitude is more significant than the level of awareness towards cryptocurrency adoption. Further, the cryptocurrency is positively viewed as a potential medium of exchange despite cynicism for it due to its volatility.

(**Mario Arias-Oliva, 2019**)^[19] This research found that financial literacy has no power as an explanatory variable for cryptocurrency acceptance and in addition, the reason for cryptocurrency ownership is on financial performance expectancy criteria and not on technology acceptance ones. (**S. Muthulekshmi and C. Subathra, 2019**) The study finds that digital currency also has drawbacks and a greater emphasis should be placed on raising public understanding on it. It is the responsibility of the media, researchers, banking and government authorities to create a proper awareness on frauds and on the vulnerability.

(**M. Gagarina et al, 2019**) The collected data supports that the willingness to use cryptocurrency is directly depends on trust in the power of money, orientation towards independence in actions, age, and gender, and is inversely dependent on confidence in the government. In simple, it is directly related to the desire for financial autonomy

and distrust of social institutions. (**Shukla, S., & Akshay, A., 2019**)^[20] in recent years there has been considerable growing interest in the literature relates to analyzing people perception and future prospects of cryptocurrency in India and their willingness to adopt it as an investment tool. The authors have followed Exploratory Research Analysis using Primary survey method in the city of Bangalore followed by secondary data analysis from various websites, journal articles and books.

(**Parashar, N., & Rasiwala, F., 2018**) the main objectives of the study were to find out the awareness among the customer of bitcoins as a form of virtual currency and acceptance of the same as a mode of cashless transaction. The descriptive research methodology was adopted with the help of a primary field survey in the city of Pune.

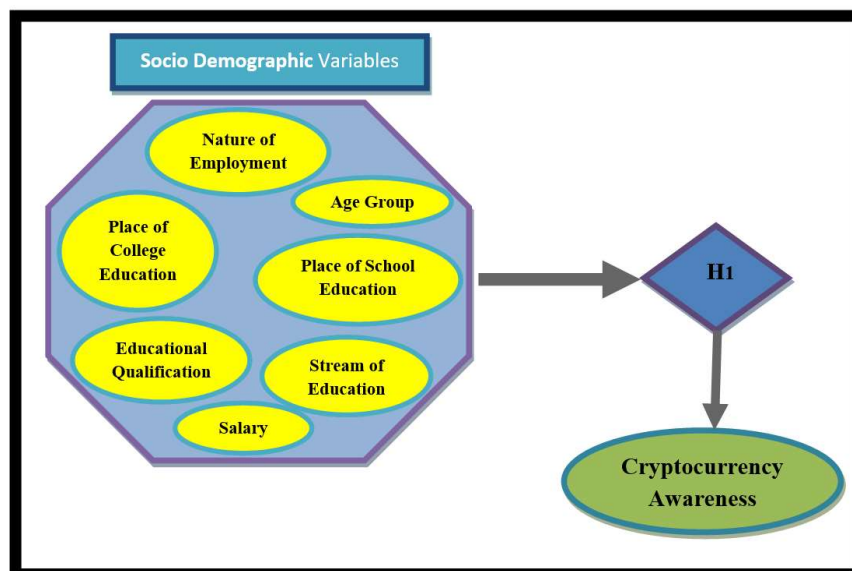
Research Gap:

Many of the existing research literatures on the cryptocurrency awareness are focusing on different sects of population like, college students in Chennai (Narayanan. S, 2020), people of Bengaluru (Shukla, S., & Akshay, A., 2019), the people of Pune (Parashar, N., & Rasiwala, F., 2018) and cross-country online internet users (Fred Steinmetz et al, 2021) etc. and recommend that such of these research studies can be studied on other target samples as well in different locations or with varied sample sets. Hence, we have chosen to study the financial literacy awareness on Cryptocurrency amongst Women Teaching Fraternity in Chennai.

Objective:

TO ANALYZE THE RELATIONSHIP BETWEEN CRYPTOCURRENCY AWARENESS OF THE WOMEN TEACHERS AGAINST THEIR SOCIO DEMOGRAPHIC VARIABLES.

Research Framework:



Hypotheses:

H1: There is a significant relationship between the Socio Demographic factors of the women teachers and with their cryptocurrency awareness level [Alternative Hypothesis].

Research Methodology:

The Descriptive Research approach served as the foundation for this study's design. To facilitate this, a structured online survey questionnaire with 24 questions that focused on demographic, conceptual, and perception was developed. Its intercorrelations reliability was tested, and the results showed that Cronbach's Alpha was 0.72, which is within the acceptable (0.7-0.8) standard of internal consistency. The research sample comprises of the

female teachers from both government and private educational institutions in Chennai City, including both schools or colleges, as the primary data.

An online survey (<https://freeonlinesurveys.com/s/DtqfJZzA>) was administered between December 30, 2022, and January 11, 2023 and received 272 responses in total. In addition, secondary data were also gathered from a range of research publications, journals, and articles.

Analysis and Results:

The descriptive statistics findings were analysed using SPSS based on the survey inputs and the frequency details of the socio demographic variables are given below in [Table 1].

Table 1: Socio Demographic Consolidated Frequency Table

Age Group	N	%	Educational Qualification	N	%
21-30	45	16.7%	UG	63	23.1%
31-40	122	44.9%	PG	129	47.4%
41-50	70	25.6%	MPhil	38	14.1%
51-60	35	12.8%	PhD	42	15.4%
Employment Type	N	%	Monthly Net Salary	N	%
Govt Institution	45	16.7%	Less than 10K	24	9.0%
Govt Aided	7	2.6%	10-20K	56	20.5%
Pvt Inst	220	80.8%	20-30K	42	15.4%
Educational Stream	N	%	30-40K	38	14.1%
Arts	91	33.3%	40-50K	28	10.3%
Science	94	34.6%	50-60	21	7.7%
Commerce	35	12.8%	60k-1L	25	9.0%
Computer	21	7.7%	1-1.5L	31	11.5%
others	31	11.5%	above 1.5L	7	2.6%
Schooling Place	N	%	College education place	N	%
Rural	62	23.1%	Rural	45	16.7%
Urban	210	76.9%	Urban	227	83.3%

The study reveals that, 77% of the women teachers are aware of the term cryptocurrency but 95% of them do not own crypto currency in any form. Further the age group of people are most involved in cryptocurrency in the women teachers' contacts are between the age of 19-30 with 24% share and astonishingly none of the other individuals are aware of cryptocurrency from the age group below 18 and above the age of 61. In the same way peculiarly, 54% of the women teachers' family members, friends or acquaintances are not aware of cryptocurrency.

Based on the crosstab correlation analysis in SPSS, it is inferred that, the primary age group of the women teachers who have the most awareness on cryptocurrency than their peers in the survey are, the age group of 31-40 with 47.5% from the total

sample; and the women teachers who did their schooling in Urban area with 77.0% of and those who works in Private institutions with 83.6% have more crypto awareness. Remarkably, all the women teachers whose net monthly income is Rs.1 lakh and above are 100% aware of the term cryptocurrency while for those who earn less than ten thousand per month being least aware of cryptocurrency. Further 80.3% of the women teachers whose educational qualification is PG and above possess the most cryptocurrency awareness and 32.8% of them whose educational stream is Science possess the most cryptocurrency awareness and finally 90.2% of the women teachers who did their college education in Urban area are the most aware of the term cryptocurrency.

The cryptocurrency awareness level was tested between the seven variables of

Socio Demography using Chi-Square Test of Independence to assess the relationship between the two the inferential statistics

analysis are as follows; and the results are tabulated in [Table 2].

Table 2: Chi Square Test of Independence Results - Summary

Serial Number	Independent Variable (IDV)	Dependent Variable (DV)	Chi-Square p value
1	Age Group	Cryptocurrency Awareness	.048
2	Nature of Employment		.028
3	Place of School Education		.253
4	Place of College Education		.002
5	Educational Qualification		.161
6	Stream of Education		.127
7	Net Salary		< .001

Most importantly the 'Net salary' whose significance level is less than .001, is the principal variable bestowing strong relationship on the cryptocurrency awareness level of the women teaching fraternity. In summary, the relationship is established for the following four socio demographic independent variables which are Age group, Nature of Employment, Place of College Education and Net Salary whose p-value is smaller than the standard alpha value, rejecting null hypothesis and shows the significant relationship with the cryptocurrency awareness level of the women teachers.

Practical Implications:

This research study has provided an insight into the possible sociodemographic factors triaged to the cryptocurrency awareness among the women teaching fraternity. Talking about their substantial relationship level, suggesting to the development of educational resources and training programs for teachers on the topic of cryptocurrency and to the other age groups who are yet to have more awareness especially Govt institutional working teachers who can be taken as a potential target population as they still

remain aloof on the crypto investment despite their awareness level. This can also be used by crypto-minters and crypto brokers and government or non-governmental agencies who are working on the financial literacy of women and cryptocurrency awareness to elucidate the socio demographic variables and their relationship on the cryptocurrency awareness of women teachers.

Conclusion:

Teachers are the fulcrum in the economic engine of any society and need to be financially literate by all means with the help of necessary information on the emerging financial parlance like cryptocurrency, be disseminated to them. It is because, these are the teachers who act as a sphere of influence in the society that they are in and play a very imperative role in the society with predominant impact in nurturing the next generation of investors who are currently a student. Women teachers more specifically, should definitely be educated about the cryptocurrency their advantages disadvantages and so on; because, they apart from playing the role of a teacher, also has an additional obligation of

managing domestic finance at home in many Indian homes by having a financial say on the family's savings or expenditure. Thinking through deeper on the implications of independent variables on cryptocurrency awareness henceforth is inevitable along with our conventional financial jargon of growth trajectory given the perceived robust and vigorous future of cryptocurrency. Thus, creating more awareness to women teachers on cryptocurrency is necessary and need of the hour.

Scope for Future Research:

In continuation of this, further study can be ventured primarily onto the means of creating cryptocurrency awareness and its efficacy with the suitable procedures; or the impact of training on cryptocurrency and their subsequent investment increase in cryptocurrency. In addition, alluding if there are any other socio demographic factors can be a reason for the cryptocurrency awareness of the women teachers either from diverse occupations or from other geographical regions, can also be taken as a topic; Moreover, the cryptocurrency awareness level of women teachers, be compared against with the men counterpart on its correspondence significance level.

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