IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Does Financial Literacy imply better Financial Health during Covid 19 Pandemic? - A Insight into Investors of Kolkata & Ranchi

Risav Adhikari & Shiwangi Poddar

Abstract

Background - Financial health is described as the state of a person's financial situation, whereas, financial literacy is described as a person's ability to understand and apply different financial concepts and skills. This paper examines the role a person's financial literacy plays, in ensuring a better financial health for the person, during these financially trying times of the Covid 19 pandemic.

Objectives - The objectives of this study are to identify the levels of financial literacy and financial health of the respondents; to understand how a person's financial literacy affects his/her financial health; and also to find the effect of the pandemic on his/her financial health.

Methodology - Data is collected through a primary survey with a structured questionnaire, among respondents in Kolkata and Ranchi. Five questions have been asked to ascertain the level of each respondent's financial literacy, these are the Big 5 financial literacy questions suggested by (Lusardi & Mitchell, 2011). Further, eight questions on a person's financial health before and during the pandemic were asked, these are according to the suggestions of (Parker, Castillo, Garon, & Levy, 2016). Respondents' financial literacy score was compared with their financial health during ANOVA. Also, their financial health before and during the pandemic was compared using paired t tests.

Findings - Through the study, it was found that higher financial literacy did mean better financial health of the respondents. Also, it was revealed that the financial health of the respondents deteriorated during the pandemic.

Originality - There is some literature available on the effect of the pandemic on business losses and joblessness, and also some on personal finance areas like lower incomes, increased expenses and lower savings during the pandemic. These papers are reactive in nature, discussing about the negative financial impact of the pandemic; but none of these papers proactively talk about how a person could prepare one's self in order to avoid this negative impact.

Practical Implications - This paper deals with how a person could apply his/her financial skills and awareness to better his/her financial health. It would fill in this gap by understanding the effect of financial literacy on an individual's financial health, during the trying times of the Covid 19 pandemic.

Keywords - Financial Literacy, Financial Health, Covid 19, Corona Virus, Personal Finance

I. Introduction

To be physically healthy, a person performs fitness activities such as exercise, proper diet, sleep and access to medical treatment. Similarly, to be financially healthy, a person performs financial fitness activities such saving, prudent borrowing, effective investment, risk management, and access to professional guidance.

Financial health is described as the state of a person's financial situation. This financial state can be understood in four dimensions: spending, saving, planning and borrowing. These four factors together provide a holistic picture of a person's financial health.

Intrinsic as well as extrinsic factors might affect a person's financial health. Intrinsic factors would include the person's awareness, knowledge, numeracy skills and risk taking ability. Extrinsic factors, on the other hand, would include economic, social, political and environment factors like earthquakes, floods, droughts or disease outbreaks.

Intrinsic factors are usually determined by the person concerned, but extrinsic factors are uncontrollable. These extrinsic factors, like a Covid pandemic, may cause financial shocks. In such situations, intrinsic factors in a person helps one to prepare and protect one's self against a financial shock. Such preparation and protection is facilitated by one's financial literacy.

Financial literacy is described as a person's ability to understand and apply different financial concepts and skills. These concepts may include time value of money, inflation, risk diversification, bond pricing, mortgage and other money management skills required to make sound financial decisions.

This paper would examine the role a person's financial literacy plays, in ensuring a better financial health for the person, during these financially trying times of the Covid 19 pandemic.

II. Literature Review

(Huston, 2015) tried to study the impact of financial education on financial outcome/behavior. A theoretical model for financial health is formulated in this paper. It proposed that financial health is constituted of 5 inputs, namely, awareness, financial literacy, habituation, examination and adjustment. So it suggested that financial literacy is one of the determining factors for financial health.

(Kaiser & Menkhoff, 2017) aim to find out whether financial education affects financial behavior and consequently financial literacy. For the purpose of the study, a meta-analysis was conducted through synthesizing findings of various empirical studies. Their study found that financial education is less effective for lower income groups. Also debt handling behavior was harder to influence through financial education.

(Arianti, 2018) measured and analyzed the effect of financial literacy and financial behavior on investment decisions. A primary survey was conducted using a structured questionnaire for purpose of the study. The results showed that financial literacy does not influence investments significantly, but financial behavior did significantly affect it.

(Dare et al., 2020) concentrated on understanding the impact of financial education on children's skills and knowledge in responsible spending patterns. The research was conducted through a primary survey of 2650 Dutch students of the fifth grade. It concluded that increased financial education impacted in better performance of transactions, but it did not imply responsible spending patterns.

(Eriksson & Söderlund, 2020) measured whether students of Umeå University make rational decisions concerning their personal finance. Further, they also tried to access their level of financial literacy. They collected quantitative data and on the basis of their responses to questions their knowledge and also how they claim to act concerning their own personal finance was determined. They found a difference in financial literacy levels between students of the different faculties. Also, the students did not make rational decisions with their finances.

(Fox & Bartholomae, 2020) studied the effect of the COVID-19 pandemic on household finances. Based on the responses from practicing financial planners, changes in practice and client concerns as a result of the pandemic were pointed out. It concluded that financial planning has accelerated the adoption of communication technology. Also the respondents were experiencing high levels of stress related to changes the economy, in health and the political landscape in the United States.

(Anand et al., 2021) tried to understand how financial literacy mediates the relationship between corona virus awareness and financial health. They applied a structural equation modelling approach to identify this mediating role of financial literacy in preparing households against sudden setbacks. The results indicated that corona virus awareness exercises an influence on the financial health of individuals through financial literacy. They also conclude that financial literacy does have a mediating effect on the personal finance of individuals during this pandemic.

(Kurowski, 2021) aimed to find whether households with a higher level of financial and debt literacy have better household's budgeting skills, which in the face of a crisis reduces the risk of individuals not paying their liabilities. A primary survey was conducted among 1300 Polish citizens. It was found out that debt literacy plays a more important role in the preparation of a household budget for the corona virus pandemic. Respondents with a higher debt literacy are less likely to default as a result of a pandemic.

(OECD, 2021) talked about the financial issued faced due to the ongoing pandemic, by concentrating on financial education and consumer protection. For this purpose, it collects data from countries in Asia during the year 2020. It has also taken into account feedback from webinars and desk research. It found that financially resilient consumers are less likely to face hardship during the pandemic, and they are also more likely to bounce back from adverse situations. It suggested that financial education should be provided as a policy response during this pandemic.

III. Research Gap

There is some literature available on the effect of the pandemic on business losses and joblessness, and also some on personal finance areas like lower incomes, increased expenses and lower savings. These papers are reactive in nature, discussing about the negative financial impact of the pandemic; but none of these papers proactively talk about how a person could prepare one's self in order to avoid these this negative impact.

This paper would deal with how a person could apply his/her financial skills and awareness to better his/her financial health. It would fill in this gap by understanding the effect of financial literacy on an individual's financial health, during the trying times of the Covid 19 pandemic.

IV. Objectives

1. To identify the effect of the pandemic on the financial health on the respondents.
2. To understand how a person's financial literacy affects his/her financial health.
3. To find the effect of demographics on financial literacy and health.

V. Methodology

Data Collection

Data is collected through a primary survey with a structured questionnaire. Five questions have been asked to ascertain the level of each respondent's financial literacy, these are the Big 5 financial literacy questions suggested by (Lusardi & Mitchell, 2011). Further, eight questions on a person's financial health before and during the pandemic were asked, these are according to the suggestions of (Parker et al., 2016).

Sampling Design

For the purpose of the study, a survey was conducted among respondents in Kolkata and Ranchi. A total of 111 respondents constitutes the sample for this study. Respondents are selected using convenience sampling.

Tools Used

Microsoft Excel is used to compile and code the data. SPSS is used to analyze it by performing tests on it. A financial literacy score is computed adding the responses of the 5 questions on it, where 1 means a correct answer and 0 means an incorrect answer. Financial health scores are also computed adding the responses to the 8 questions asked. Here 1 means bad financial health, 2 means mediocre financial health and 3 means good financial health. Two such scores are computed, one pertaining to the financial health condition before the pandemic, and another one for during the pandemic.

In order to identify the effect of the pandemic on financial health, the mean financial health scores before and during the pandemic are compared. The significance of the changes in the 8 individual financial health variables are ascertained using Paired t tests.

To understand the effect of financial literacy on financial health, correlation analysis is conducted on the financial health and the financial literacy scores. Individual financial health variables are also been tested against the financial literacy score using ANOVA, to find significant relations.

The effect of the demographic variables on the financial literacy and the financial health scores are tested using ANOVA.

VI. Analysis & Findings

Reliability Test

For assessing the reliability, Cronbach's Alpha has been computed. A value of Cronbach's Alpha more than 0.7 signifies the data is reliable.

In this case, the value of Cronbach's Alpha is 0.744, thus our data is good in terms of reliability.

Cronbach's Alpha	N of Items
.744	21

Table 1: Reliability Statistics

1. Effect of the Pandemic on Financial Health

i. Change in Mean Financial Health Scores

The mean score of financial health before and during the pandemic has fallen from 18.28 to 17.39. This signifies that the financial health of the people has declined because of the pandemic.

		Financial Health Score_Before Pandemic	Financial Health Score_During Pandemic
N	Valid	111	111
Mean		18.28	17.39
Median		18.00	17.00
Mode		17	15

Table 2: Mean, Median & Mode of Financial Health Scores Before & During the Pandemic

ii. Change in Individual Financial Health Items due to the Pandemic

The below table tried to find if there is any significant relationship between individual financial health items due to pandemic. It was found out that Bills & Credit Commitments had a P value of 0.00 and Percentage of Income Used for Debt Payments had a P value of 0.020 which shows a significant relationship with pandemic as P values are less than 5%.

Variable	P Value	Significant/Not Significant
Monthly Spending Pattern	*0.610*	Not Significant
Bills & Credit Commitments	*0.000*	*Significant*
Saving Habits	0.752	Not Significant
No. of Months Expenses in Liquid Balance	0.068	Not Significant
Percentage of Income Used For Debt Payments	*0.020*	*Significant*
Payment Experience With Credit Cards	0.134	Not Significant
Insurance Cover	0.265	Not Significant
Monthly Budget	0.259	Not Significant

Table 3: Paired t Tests of Financial Health Variables Before & During the Pandemic

iii. Mean of the Significantly Changed Individual Financial Health Items

To understand the relationship between Bills & Credit Commitments before and during the pandemic the mean values can be seen from the above table. It was concluded that during the pandemic people were less able to keep up with their bills and credit commitments as the mean values fell from 2.50 to 2.19.

		Mean	N
Pair 1	Bills & Credit Commitments_Before Pandemic	2.50	111
	Bills & Credit Commitments_During Pandemic	2.19	111

Table 4: Paired t Test of Bills & Credit Commitments Before & During the Pandemic

To understand the relationship between Percentage of Income Used for Debt Payments before and during the pandemic the mean values can be seen from the above table. It was concluded that during the pandemic people used less percentage of their income for the payment of debt as compared to what they were doing before the pandemic. As the mean values fell from 2.47 to 2.32.

		Mean	N
Pair 2	Percentage of Income Used For Debt Payments_Before Pandemic	2.47	111
	Percentage of Income Used For Debt Payments_During Pandemic	2.32	111

Table 5: Paired t Test of Percentage of Income Used for Debt Payments Before & After the Pandemic

2. Effect of Financial Literacy & Financial Health

i. Correlation between Financial Literacy & Financial Health

Correlation between Financial Literacy and Financial Health of respondents was calculated. It was found out that they have a positive correlation with 0.189 score. They also showed a significant relationship with one another with P value 0.047.

Thus, it was inferred that Financial Literacy and Financial Health indeed had a relationship with one another in such a way that more financially literate the person is better their financial health would be.

		Financial Literacy Score
Financial Health Score_During Pandemic	Pearson Correlation	.189
	Sig. (2-tailed)	.047
	N	111

Table 6: Correlation of Financial Literacy & Financial Health Scores

ii. Relations between Financial Literacy & Individual Financial Health Items

The table below tried to find if there is any significant relationship between Financial Literacy and different items under Individual financial health. It was found out that Monthly Spending Pattern and Saving Habits had a significant relationship with the Financial Literacy levels of the person with P values of 0.044 and 0.001, which are less than 5%.

Variable 1	**Variable 2**	**P Value**	**Significant/Not Significant**
Monthly Spending Pattern	*Financial Literacy*	*0.044*	*Significant*
Bills & Credit Commitments	Financial Literacy	0.159	Not Significant
Saving Habits	*Financial Literacy*	*0.001*	*Significant*
No. of Months Expenses in Liquid Balance	Financial Literacy	0.461	Not Significant
Percentage of Income Used For Debt Payments	Financial Literacy	0.101	Not Significant
Payment Experience With Credit Cards	Financial Literacy	0.702	Not Significant
Insurance Cover	Financial Literacy	0.863	Not Significant
Monthly Budget	Financial Literacy	0.722	Not Significant

Table 7: ANOVA Results for Financial Health Variables & Financial Literacy Score

iii. Means of Significantly Related Individual Financial Health Items

The mean financial literacy scores are compared across different Monthly Spending Pattern groups. It can be seen that individuals who spend much less than their income had a higher mean financial literacy, compared to those who spent equal to or less than their income.

	N	Mean
Spend much less or a bit less than income	15	2.86
Spend about equal to income	33	2.21
Spend a bit more or much more than income	63	2.60
Total	111	2.63

Table 8: Mean Financial Literacy Scores according to Monthly Spending Pattern

To understand the relationship between financial literacy scores and saving habits of the people the mean values can be seen from the above table. It was concluded that people with higher levels of financial literacy tend to save regularly by putting aside a fixed sum each month as compared to others with less financial literacy scores who were either not saving at all or were not serious about their saving plans.

	N	Mean
Save regularly by putting money aside each month	12	2.95
Save whatever is left over at the end of the month – no regular plan	56	2.64
Don’t save, usually spend about as much as, or more than, income	43	1.42
Total	111	2.63

Table 9: Mean Financial Literacy Scores according to Saving Habits

3. Demographics with Financial Literacy & Financial Health

i. Relations between Demographics & Financial Literacy

The table below tried to find if there is any significant relationship between Financial Literacy and Demographics. It was found out that Employment status and Income levels had a significant relationship with the Financial Literacy levels of the person with P values of 0.013 and 0.012 which is less than 5%.

It was also observed that financial literacy had no relation with gender, giving us a statistical proof against the gender stereotyping of females.

Variable 1	Variable 2	P Value	Significant/Not Significant
Gender	Financial Literacy	*0.483*	Not Significant
Age	Financial Literacy	0.244	Not Significant
Education	Financial Literacy	0.088	Not Significant
Employment	*Financial Literacy*	*0.013*	*Significant*
Income	*Financial Literacy*	*0.012*	*Significant*

Table 10: ANOVA Results of Demographics & Financial Literacy Score

ii. Means of Significantly Related Demographics (with Financial Literacy)

To understand the relationship between financial literacy and employment, the mean values can be seen from the above table. It was concluded that apart from the people who are unemployed were comparatively less financially literate compared to the rest of the population.

	N	Mean
Salaried	56	2.95
Business	8	2.25
Temporary/Freelance	7	2.43
Studying	28	2.61
Unemployed	12	1.58
Total	111	2.63

Table 11: Mean Financial Literacy Scores according to Employment Status

To understand the relationship between financial literacy and Income levels, the mean values can be seen from the above table. It was concluded that people with income levels between 15000-30000 and 30001-45000 were more financially literate than the rest of the respondents.

	N	**Mean**
Below 15000	44	2.34
15000 - 30000	9	3.33
30001 - 45000	9	3.56
45001 - 60000	15	2.13
Above 60000	34	2.79
Total	111	2.63

Table 12: Mean Financial Literacy Scores according to Income

iii. Relations between Demographics & Financial Health

The table below tried to find if there is any significant relationship between Financial Health and Demographics. It was found out that Gender and Age had a significant relationship with the Financial Health of the person with P values of 0.001 and 0.006 which is less than 5%.

Variable 1	**Variable 2**	**P Value**	**Significant/Not Significant**
Gender	*Financial Health*	*0.001*	*Significant*
Age	*Financial Health*	*0.006*	*Significant*
Education	Financial Health	0.280	Not Significant
Employment	Financial Health	0.290	Not Significant
Income	Financial Health	0.553	Not Significant

Table 13: ANOVA Results of Demographics & Financial Health Score

iv. Means of Significantly Related Demographics (with Financial Health)

To understand the relationship between financial health and gender, the mean values can be seen from the above table. It was concluded that Females had a better financial health as compared to males with mean scores 18.37 which is higher than 16.10.

	N	**Mean**
Male	48	16.10
Female	63	18.37
Total	111	17.39

Table 14: Mean Financial Health Scores according to Gender

To understand the relationship between financial health and age, the mean values can be seen from the above table. It was concluded that people in the age group between 19-30 and 31-40 had a better financial health with higher mean scores of 18.00 and 17.12 as compared to the rest of the respondents.

	N	**Mean**
19 - 30	71	18.00
31 - 40	25	17.12
41 - 50	15	14.93
Total	111	17.39

Table 15: Mean Financial Health Scores according to Age

VII. Conclusion

Conclusion to Objective 1: Effect of the Pandemic on Financial Health

It can be concluded that the pandemic did adversely affect the financial health of individuals. Individuals were less able to meet their Bills & Credit Commitments during the pandemic. They could utilize less of their Income for Debt Payments, most probably due to increased expenses in the pandemic.

Conclusion to Objective 2: Effect of Financial Literacy on Financial Health

Financial Literacy and Financial Health were found to be positively correlated, meaning that individuals who were financially more literate fared better in terms of financial health during this pandemic. Individuals with higher financial literacy were mostly found to spend much less than their income, and save money regularly each month.

Conclusion to Objective 3: Effect of Demographics on Financial Health & Financial Literacy

Employment and Income were found to be significantly related to Financial Literacy. Salaried individuals had the highest Financial Literacy as compared to Unemployed individuals having the lowest. Also individuals earning in the middle income brackets of 15000-30000 and 30001- 45000 were financially the most literate.

Gender and Age were significantly related to Financial Health. Females had better financial health during the pandemic as compared to Males. Also, individuals from lower age groups fared better in terms of financial health in the pandemic.

References

1. Anand, S., Mishra, K., Verma, V., & Taruna, T. (2021). Financial literacy as a mediator of personal financial health during COVID-19: A structural equation modelling approach. *Emerald Open Research*, *2*(May), 59. https://doi.org/10.35241/emeraldopenres.13735.2
2. Arianti, B. F. A. (2018). The influence of financial literacy, finacial behaviour and income on investment decision. *Economics and Accounting Journal*, *1*(1), 1–10. https://doi.org/10.32493/eaj.v1i1.y2018.p1-10
3. Dare, S. E., van Dijk, W. W., van Dijk, E., van Dillen, L. F., Gallucci, M., & Simonse, O. (2020). The effect of financial education on pupils' financial knowledge and skills: Evidence from a Solomon four-group design. *Journal of Educational Research*, *113*(2), 93–107. https://doi.org/10.1080/00220671.2020.1733453
4. Eriksson, J., & Söderlund, A. (2020). *Financial Literacy & Rational Financial Decision Making* [Umeå University]. https://www.diva-portal.org/smash/get/diva2:1447966/FULLTEXT01.pdf
5. Fox, J., & Bartholomae, S. (2020). Household finances, financial planning, and COVID -19 . *Financial Planning Review*, *3*(4), 1–9. https://doi.org/10.1002/cfp2.1103
6. Huston, S. J. (2015). Using a financial health model to provide context for financial literacy education research: A commentary. *Journal of Financial Counseling and Planning*, *26*(1), 102–104. https://doi.org/10.1891/1052-3073.26.1.102
7. Kaiser, T., & Menkhoff, L. (2017). Does financial education impact financial literacy and financial behavior, and if so, when? *World Bank Economic Review*, *31*(3), 611–630. https://doi.org/10.1093/wber/lhx018
8. Kurowski, Ł. (2021). Household ' s Overindebtedness during the COVID-19 Crisis : *Risks*, *9*(4), 1–19. https://doi.org/https://doi.org/10.3390/risks9040062
9. Lusardi, A., & Mitchell, O. S. (2011). Financial literacy around the world: An overview. *Journal of Pension Economics and Finance*, *10*(4), 497–508. https://doi.org/10.1017/S1474747211000448
10. OECD. (2021). Financial consumer protection and financial literacy in Asia in response to COVID-19. *OECD*. http://www.oecd.org/financial/education/financial-consumer-protection-and-financial-literacy-in-asia-in-response-to-covid-19.htm
11. Parker, S., Castillo, N., Garon, T., & Levy, R. (2016). Eight Ways to Measure Financial Health. *Center for Financial Services Innovation (CFSI)*, *May*, 1–16. https://s3.amazonaws.com/cfsi-innovation-files/wp-content/uploads/2017/01/19202805/FinHealth-Metrics-FINAL_May.pdf