

IMPACT OF MENTAL HEALTH AND WELL-BEING OF INDIAN STOCK MARKET TRADERS

Manda, Vijaya Kittu and Sana, Alekhya

GITAM DEEMED TO BE UNIVERSITY, VISAKHAPATNAM, INDIA, GITAM DEEMED TO BE UNIVERSITY, VISAKHAPATNAM, INDIA

27 September 2021

Online at https://mpra.ub.uni-muenchen.de/109941/ MPRA Paper No. 109941, posted 28 Sep 2021 05:00 UTC

IMPACT OF MENTAL HEALTH AND WELL-BEING OF INDIAN STOCK MARKET TRADERS

VIJAYA KITTU MANDA

Research Scholar, GITAM Institute of Management, GITAM Deemed to be University,

Visakhapatnam 530 045

Email: vijaykittu@hotmail.com

ORCID: 0000-0002-1680-8210

ALEKHYA SANA

Research Scholar, Department of Applied Psychology, GITAM Deemed to be University,

Visakhapatnam 530 045

Email: alekhya.sanas@gmail.com

ORCID: 0000-0001-5949-6555

Abstract

Background: Stock market traders can be successful by picking the right financial

security/instrument to invest/trade and then prepare and executing the trading plan. However,

the success rate from doing so is only partly. The other part of success, which, unfortunately, is

mostly ignored, comes from emotional and behavioral balance and control. Research already

proved the connections between emotions and the mental health of individuals. Objectives: This

paper explores the mental health aspects of a typical Indian stock market trader. Design: A self-

constructed questionnaire is administered on a sample of 250 where 140 respondents were taken

for the study on four dimensions-general trading stress profile, general mental and health

profile, general lifestyle profile, and general financial status profile. Method: Data thus

collected is statistically measured and tested using Chi-square, Pearson correlation, and simple

linear regression. Results: The research finds that age and marital status influence the stock

market trader experience along with the highest, moderate and lowest areas where the trader is

affected on the above-mentioned dimensions. Conclusion: Findings from this research can help

traders in bettering their mental health and thereby improve their trading outcomes.

1

Keywords: stock market crash, trader suicide, trader mental health well being

JEL classification: G10, I19, I31

Introduction

Stock market trading is a dynamic and distinct profession in itself. However, non-professional individuals jump into the activity because of easy access to the market to make huge money in a short time. The number of traders and investors entering the capital markets has been at historic highs, as seen from the De-mat accounts opened at several countries' central depository systems. (Sultana & Ramarathinam, 2020) (Khan, Tan, & Chong, 2017) Unable to control their endless greed, most of them lose some or all of their money before giving up or going back to learning the basics. Even patient investors, at times, jump into trading, eroding their wealth. (Barber & Odean, 2000) Research literature well documented the spillover effects of stock market trading. Research shows that one standard deviation reduction in daily stock market returns is associated with a 0.6% increase in fatal car accidents. (Giulietti, Tonin, & Vlassopoulos, 2020)

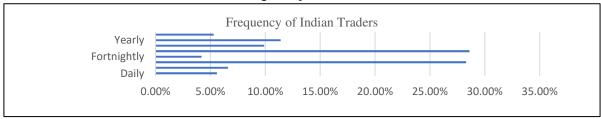
Though stock market trading volumes are increasing in India, it is mostly due to institutional investors' algorithmic trading than retail traders. (Sudhakar, Naganjaneyulu, & Rama Mohan, 2018) As many as 75 percent of the retail traders have less than five years of trading experience. Though internet penetration improved over the years, as many as 78 percent of retail traders use the call-in-trade mode of order placement. A bulk of these traders' trade on a weekly (28%) and monthly basis (29%) over daily (5%). (SEBI, 2015)

Table 1: Experience (in years) of urban investors

Years in the Market	Frequency	Percentage	Cumulative
1 to 5	3100	74.8%	74.8%
6 to 10	1047	21.6%	96.4%
11 to 15	125	2.7%	99.1%
16 to 20	23	0.3%	99.4%
20+	10	0.6%	100.0%

Source: SEBI Investor Survey 2015; Sample size: 4,305 (a subset of urban investors who responded)

Chart 1: Frequency of Indian Traders



Source: SEBI Investor Survey 2015; Sample size: 5,326

Literature review

Knowledge/Experience: Compulsive gambling or addiction to trading is prevalent among some traders, strongly correlated with speculative trading behavior. This addiction is beyond factors like overconfidence, risk tolerance, financial literacy, and trading experience. (Cox, Kamolsareeratana, & Kouwenberg, 2019) Of course, local norms and regulations influence gambling behavior in the financial markets. (Kumar, Page, & Spalt, 2011) Demographic characteristics and investor decision making are closely related, and hence financial institutions use them during product design. (Lan, Xiong, He, & Ma, 2018) (Sane, 2019) studied trading behavior during a period of accounting fraud and found that cashing out of bad stocks happens immediately over the next six days to the extent of 10.7 percentage points of their entire portfolio. However, there is no difference in the treated and controlled investors' trading behavior after one month. Her examination was on daily investor accounting holdings data from the National Securities Depository Limited (NSDL) during the Satyam scandal of January 2009. A survey involving 250 traders on six factors - experience, financial knowledge, academic qualifications, opinions of financial advisors, and past performance of the stock funds that investor overconfidence grows significantly as experience and financial knowledge factors. (Bashar & Hammash, 2017) In the absence of skills, trader blindly speculates by making wild guesses. Perhaps stock market trading comes next only to conventional gambling, like the lottery, where wild guesses often aid in decision making. Studies showed a negative correlation between retailer stock market trading and lottery prizes. It becomes clear that some traders substitute playing the stock markets with the lottery. (Dorn, Dorn, & Sengmueller, 2014) Keeping well informed about ever-changing market rules and regulations is essential for a trader. Circulars are issued almost every day and are optimizing by the market regulator – the Securities and Exchanges Board of India (SEBI). Some regulation changes, such as minimum trading unit (MTU) restrictions, act as a binding constraint for traders while optimizing trade sizes. (Banerjee & Banerjee, 2019)

Stress Profile: Small investor sentiment measurement in the dimensions of fear, gloom, joy, and stress is studied by (Griffith, Najand, & Shen, 2019) to predict market returns and market volatility. Fear has a significant and long-lasting effect on market returns. Stress is found to have a relatively smaller impact on returns and often shows up with a one-day lag. Gloom and joy have no role in predicting returns. Studies show that happy investors are optimistic, and when their general mood is better, they expect higher returns from the markets. (Kaplanski, Levy, Veld, & Veld-Merkoulova, 2013) Stock market trading is a stressful profession, and, on many occasions, the trader himself is his greatest enemy. Being aware of stress levels measurement technology, such as Ambient Intelligence, can edge the trader. (Fernández, Augusto, Seepold, & Madrid, 2010)

Mental Health & Wellbeing: Research circles well documented violent stock market crashes and shocks. The relationship between behavioral consensus, correlation to stock market returns, and market volatility are examined, and are the indicators are found to have a phase transition. (Ma, Zhang, & Li, 2017) Immense coupling strength leads to an increase in the three factors. When coupling strength equals one, traders neglect their random factors and follow the market trend. Ample research shows how events, such as industry events, impact stock markets and induces liquidity and volatility. (Corbet, Larkin, & McMullan, 2020) Economic and financial stress can potentially lead to a human capital loss in the form of suicide or murder-suicide. Policymakers can potentially use a two-year lag between a job-loss and the human loss to deter traders from taking extreme actions. (Agrrawal, Waggle, & Sandweiss, 2017) The profession of financial traders involves careful handling of risk management. Dynamic and unpredictable markets often make trades miss the risk management part leading to capital loss and, in extreme

cases, to suicide. The connection between trading risk, financial debt, and stock market collapse, from mental health studies, is close to suicides. (Livingston, 2009) (Caitlin, 2004) Research studies discussed the consequences of economic shocks on traders' mental health and the use of mental health treatments in response to these adverse macroeconomic events. A sudden market crash reduces wealth, increases depression feelings of the traders, and thereby the necessity to deal with these bad feelings by using antidepressant drugs. (McInerney, Mellor, & Nicholas, 2013) Emotions expressed in online communication not only impacts traders in their decision making but also can predict their trading behavior. Traders moderately expressing emotional activation make relatively profitable traders over those who express little or high emotion levels. (Liu, Govindan, & Uzzi, 2016) As investor intelligence levels increases, average trading volumes decrease, and the standard deviation of returns increases. (Manahov, Soufian, & Hudson, 2014) Trading breaks (such as overnight, weekends, and holidays) leads to new information accumulation flowing to make uninformed option traders excessively perceive risk, thereby postponing their decisions. Typically, it takes two days for this risk perception to come down before the traders can re-join the mainstream and get back to placing their orders. Evidence of this effect can be obtained by observing the typical weekday trading volumes. Thus, there is a relationship between trading and trader information processing capabilities and stock and index price discovery. In a clinical study of day-traders, the worse trading performance is visible in subjects whose emotional reaction to monetary gains or losses was more intense. The research says that trading skills may not necessarily be innate and that different personality types will trade well after proper instruction and practice. (Lo, Repin, & Steenbarger, 2005) Overtrading is linked to psychological and behavioral bias. (Phan, Rieger, & Wang, 2018) Stock market trading is a form of self-employment for some professional traders. In general, self-employment leads to increased job satisfaction and life satisfaction but could lead to more mental health problems even though they do not perceive it as mentally straining. (Pernilla, 2008)

Lifestyle: Sleep disorders have gained prevalence because of modern socio-economic and lifestyle factors. Advocacy for sleep quality, quantity, and hygiene is necessary. (Siddalingaiah, 2017) The Indian capital markets have Monday to Friday week. The Equity market allows trading between 9:00 AM to 3:30 PM. However, the commodity market is open between 10 AM to 11:30 PM. There were proposals to increase market timings, every now and then. SEBI released a discussion paper highlighting the pros of increasing market hours (SEBI, 2018). However, the plans were mainly shelved because of operations reasons. Over the century, financial market participants have lost two hours of sleep per day. There are large negative returns from the markets following a daylight-saving weekend attributed to sleep desynchronies. (Kamstra, Kramer, & Levi, 2000) Attitudes and behaviors in individuals' daily financial affairs can reveal their financial competence and consequential product needs. (Fünfgeld & Wang, 2009) Daily stock market returns and admissions in hospitals for psychological conditions such as anxiety, panic disorder, or depression have an indirect relationship. (Engelberg & Parsons, 2016) A significant inverse relationship between high-frequency heart rate variability (HF HRV) and market volatility and a positive relationship between HF HRV and trader experience. (Mark, et al., 2012) Both single-day falls and the frequent daily market drops impact are both associated with more neurotic disorder doctor visits.

Research gap

Though many studies are done on stock market traders, fewer studies have been conducted on the general trading stress, financial status, physical and mental health, and their current lifestyle in the Indian scenario. This study attempts to highlight the factors impacting the traders in their daily work-life scenario.

Objectives of the study

- 1 To find out whether demographic variables influence on years of experience of Indian stock market traders.
- To determine the extent of General trading stress/pressure, lifestyle, mental health, well-being, and traders' financial status based on their years of experience.
- 3 To find out the factors affecting more and least in the mentioned four variable domains in their daily trading routine.

Study period

The research is conducted in the months of December 2019 - January 2020, which is significant. This is a period where the stock markets are experiencing huge macroeconomic turbulence. There was a severe global and domestic economic slowdown having a cascading effect on global markets. The 2019 Novel Coronavirus that started in China is marked as a public health emergency by the World Health Organization (WHO), which impacts the markets. The Chinese stock exchanges are shut down briefly, and the Lunar New Year holidays were extended. Domestically, January is the month when Foreign Institutional Investors (FII) return back from the Winter/Christmas holidays and come back to market participation. January is the start of the quarterly results announcement season for the listed companies ending December 31. The Indian Union Budgets in recent times were scheduled on February 1. All these events will mean high intraday swings in the stock market and sudden abrupt change in the market direction during the stock market trading hours. These are incredibly stressful times for a typical stock market trader. So much is the impact of the Union Budget on the stock markets that social media has coined the term "Februavorry" after a lackluster budget in February 2020.

Method

This Descriptive Study is considered to analyze and assesses the mental health of the Indian stock market traders. Purposive sampling is done by selecting only active traders who are

working in the current Indian market. The sample size chosen for the study is 250, but due to the paucity of time availability, only 140 were finally considered after cleaning the responses data. The survey method is used to collect responses with A structured questionnaire covering the basic demographic variable information like age, education, marital status, and years of experience in the stock market are taken from the respondents' sample. The possible influencing factors are included as items in the core dimensions divided into four categories. These include General Trading Stress profile, General Mental Health & Well-being profile, General Lifestyle profile, and General Financial Status profile of stock market traders. A 5-point Likert Scale is used almost for all the core dimensions in the questionnaire. All the instructions were specified in the forms. Also, additional questions related to their physical health and personal experiences are recorded and kept confidential as per the research ethics to serve the purpose for the same. As a new questionnaire is developed, factor analysis is done to check the items' reliability and validity. Data collection - Reliability Statistics for the 44 questions taken in the questionnaire are shown in Table 2. The Cronbach's Alpha result (.840) is good, and hence, the research can proceed. Table 3 depicts the high mean value with green color, moderate significance with blue color, and less significance with the red color of all 44 items in the questionnaire. There are two single questions 1. Trading related in stock markets. And last one 44. To check the ways how traders relax to relieve their stress/pressure. Questions 2-23 are related to the General trading stress profile. Questions 24-36 are related to the General mental health well-being profile. Questions 37-40 are related to the General Lifestyle profile, while Questions 41-43 dealt with the General financial status profile of stock market traders. Data Analysis – The statistics used for the study are Descriptive Statistics - Chi-Square, Frequencies, Standard Deviation, Pearson Correlation, and Simple Linear Regression for the current study. IBM SPSS 23 is used for the analysis of data. Pivot tables and charts are also used to represent the data.

Table 3: Item Statistics

Stock Market Trader Experience						
S.No.	Dimensions/Factor items	Mean	Std.			
			Deviation			
1.	Stock Market Trading Experience	2.93	1.077			

General Trading Stress Profile						
S.No.	Dimensions/Factor items	Mean	Std. Deviation			
2.	I usually take breaks after each trade	2.46	.999			
3.	I am with fear or feel scared while trading	2.73	1.180			
4.	Do you read books or listen to music in the least volatile	2.01	1.211			
	hours of the trade					
5.	I will still continue to trade even after a huge loss	2.72	1.258			
6.	I become over-confident, and trade after a continuous gain on profits/wins overtrades on a particular day	2.60	1.274			
7.	I usually focus on applying the habits and strategies followed by successful traders in my daily trading routine	2.86	1.293			
8.	I would correct my mistakes researching on what went wrong instead of worrying	3.26	1.305			
9.	I miss the news, updates, without information/knowledge and impulsively trade	2.79	1.071			
10.	I feel panicked and more stressful after a huge loss	2.93	1.290			
11.	I am confident enough that my emotions are controlled by the decisions made from principles, methods, and rules of trading	2.54	1.226			
12.	I feel that my own behavior affects my trading results	2.59	1.479			
13.	I feel motivated and happy if I set some monetary/cash or benefitting self-targets or rewarding myself for success	2.51	1.462			
14.	I abide by basic rules of trading, planning and timing required for the successful trading process	3.06	1.195			
15.	I feel that I'm in need of a trading coach/mentor	3.04	1.291			
16.	I feel easily frustrated and impatient	2.59	1.217			
17.	I often feel pressured with investor's choices overruling my decisions affecting trading results	2.46	1.225			
18.	I am happy with my profession as trading is my passion, gives me good recognition, money, and status	2.51	1.375			
19.	My workplace and cubicle comprise of a pleasant, healthy, well equipped, ergonomic environment	2.46	1.226			
20.	I meditate, stretch, walk or relax if I'm stressed or under pressure	2.56	1.282			
21.	I usually get panic attacks when I'm highly stressed or when in anxiety	2.16	1.271			
22.	I believe I have good financial knowledge, technical skills, emotionally balanced and an avid researcher with information in trading domain	2.56	1.288			
23.	I have been low and suffered from depression when things went wrong with my decisions	2.19	1.205			

Source: Author compilation; N=140

	General Mental Health & Well-being Profile						
S.No.	S.No. Dimensions/Factor items Mean Std.						
			Deviation				
24.	I have been feeling useful	3.26	1.203				
25.	I have been feeling interested in 3 people	3.02	1.295				

26.	I have had the energy to spare	3.31	1.212
27.	I have been dealing with problems well	3.16	1.284
28.	I have been thinking clearly	3.22	1.309
29.	I have been feeling good about myself	3.44	1.305
30.	I have been feeling close to a few people	3.27	1.234
31.	I have been feeling confident	3.41	1.313
32.	I have been able to make up my own mind about things	3.39	1.318
33.	I have been feeling loved	3.22	1.270
34.	I have been interested in new things	3.19	1.412
35.	been feeling cheerful	3.24	1.239
36.	Have you ever experienced suicidal tendencies because of your	3.16	1.306
	trading failure?		

Source: Author compilation; N=140

	General Lifestyle Profile						
S.No.	Dimensions/Factor items	Mean	Std.				
			Deviation				
37.	I am not particular with timings related to my meals	2.53	1.184				
38.	I have sleep issues.	2.07	1.197				
39.	I worry about future health complications due to my habits as	2.96	1.159				
	well as stress levels.						
40.	How often do you exercise?	3.01	1.235				

Source: Author compilation; N=140

General Financial Profile						
S.No.	Dimensions/Factor items	Mean	Std. Deviation			
41.	What's your current financial situation?	2.97	1.314			
42.	Did your household experience any of the following past events in the last twelve months? a)Payment of bills overdue b)Received a payment reminder c)Unable to draw money from your checking account d)Automatic transfer was refused e) Received payment notices from a debt collection agency f)More than ten days late with rental or mortgage payments g) Seizure of income h) Late payment of health insurance premium	2.66	.810			
43.	Is it easy for you to meet your domestic expenses?	2.53	1.278			

Source: Author compilation; N=140

	Overall general question for preferences to reduce stress/pressure						
S.No. Dimensions/Factor items Mean S							
44.	How do you prefer to relax to reduce your stress or pressure?	3.36	1.039				

Source: Author compilation; N=140

Descriptive & chi-square representation of demographics

The 140 samples of stock market traders are re-categorized for a better analysis. Table 4 shows 31-40 years as the mean age resulted is 39.2 years. The education category showed that most of the stock traders are Graduation holders. Married people also were of maximum representation among single and other categories. Lastly, the dominant representation of stock market traders is seen in the above five years with experience.

Table 4: General demographic variables descriptive of Stock market traders

Dimensions	Categories	Frequency
	21-30	37
	31-40	47
Age range	41-50	33
	51-60	16
	Above 61	7
	10 th /10+2/intermediate	14
Education	Graduation	85
	Post-graduation	41
	Single	38
Marital status	Married	88
	Other	14
	Less than a year	13
Stock market trading	1-3 years	47
experience	3-5 years	17
	Above 5 years	63

Source: Author compilation; N=140

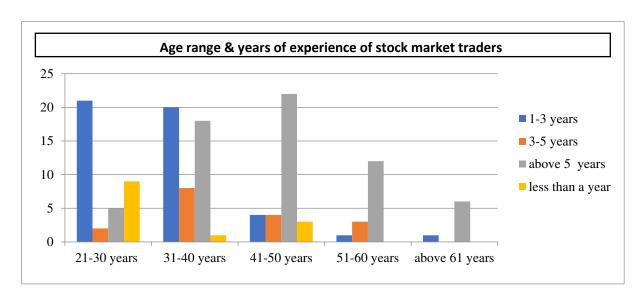
Table 5: Chi-Square test statistics & decision table with demographic variables

Dimensions	Age range	Education	Marital status	Stock market trading experience
Test Statistic	37.571 ^a	55.043 ^b	61.086 ^c	49.600 ^d
Degree Of Freedom	4	2	2	3
Asymptotic Sig.(2- sided test)	.000	.000	.000	.000

- a. There are 0 cells (0%) with expected values less than 5. The minimum expected value is 28
- b. There are 0 cells (0%) with expected values less than 5. The minimum expected value is 46.667.
- c. There are 0 cells (0%) with expected values less than 5. The minimum expected value is 46.667.
- d. There are 0 cells (0%) with expected values less than 5. The minimum expected value is 35. Source: Author compilation; N=140

Table 5 shows the null hypothesis with the demographic variables of Age range, Education, Marital Status and Stock Market trading experience occur with equal probabilities at the significant level 0.050. Hence, the decision is to reject the null hypothesis in this One-Sample Chi-Square Test.

Chart 2: Age range & years of experience of stock market traders



Source: Author compilation

As per the chart 2 above the Trader age range and years of experience in the stock market represents that the traders who had less than a year experience is found in 21-30 years of age group followed by 41-50 years. 1-3 years' experience is mostly seen in the 21-30 years, followed by 31-40 years. Traders with 3-5 years of experience are mostly seen in 31-40 years, followed by 41-50 years. The above five years of experience category shows a maximum in 41-50 years age group followed by 31-40 years and 51-60 years, respectively.

Prone to habits to relieve stress/pressure and physical health issues according to age group and years of experience of stock market traders 160 140 ■ 1-3 years 120 ■ 3-5 years 100 ■ above 5 years 80 less than a year 60 Grand Total 40 20 0 21-30 41-50 above 61 31-40 51-60 Grand Total years years years years years

Chart 3: Prone to habits to relieve stress/pressure and physical health issues

Source: Author compilation

Chart 3 shows that the age group 41-50 years followed by 31-40 years, 51-60 years, above 61 years are more prone to habits physical health issues and more stress who have above five years of experience followed by 21-30 and 31-40 years of age with 1-3 years of experience. Lastly, the traders having 3-5 years of experience showed high stress/pressure with physical health issues in 31-40 years age category.

Chart 4 depicts the nature of physical health issues usually suffered by most of the stock market traders who are seen and suffered in general are taken into consideration for the research purpose. The results are divided into two categories based on:

YEARS OF STOCK MARKET TRADERS EXPERIENCE AND PHYSICAL HEALTH ISSUES 70 60 50 40 30 ■ 1-3 years 20 ■ 3-5 years BLOOD PRESSURE -.. above 5 years SHOULDER PAIN **EYE DISORDERS** HEART RELATED DISORDERS OBESITY Melatonin Deficiency/Cancer HAND/ARM/ WRIST PAIN **NOT MENTIONED** GASTROINTESTINAL Trigger finger/Carpal **BACK PAIN NECK PAIN** POSTURAL STRESS less than a year

Chart 4A: Trader's years of experience with Physical health issues

Source: Author compilation

Chart 4A - Years of experience and physical health issues

All health issues mentioned above are suffered more with stock market traders who have more than five years of stock market experience only with eye disorders, which found to be maximum with traders of 1-3 years.

AGE RANGE OF STOCK MARKET TRADERS AND PHYSICAL HEALTH ISSUES 50 45 40 35 30 25 20 15 10 5 0 ■ 21-30 years ■ 31-40 years ■ 41-50 years ■ 51-60 years BLOOD PRESSURE -.. SHOULDER PAIN **NECK PAIN** HAND/ARM/ WRIST PAIN **BACK PAIN** Melatonin. **EYE DISORDERS** HEART RELATED. OBESITY GASTROINTESTINAL. NOT MENTIONED **Frigger finger/Carpal** POSTURAL STRESS ■ above 61 years

Chart 4B: Age range of Stock Market Traders and Physical Health Issues

Source: Author compilation

Chart 4B -Age range and physical health issues

31-40 years of age group showed maximum health issues mentioned above; only shoulder pain exceeded with 41-50 years category.

Table 6: Correlations

Dimensions	Age range	Education	Marital Status	Stock Marke t Tradin g Experi ence	General Trading Stress Profile	General Mental Health Status Profile	General Lifestyle Profile	General Financial Status Profile
Age range	1	-0.047	.500**	.508**	0.045	0.084	-0.063	-0.063
Education	-0.047	1	-0.069	-0.068	0.061	0.13	0.041	0.088
Marital Status	.500**	-0.069	1	.504**	0.025	-0.103	-0.005	-0.012
Stock Market Trading Experience	.508**	-0.068	.504**	1	-0.062	-0.012	0.031	0.059
General Trading Stress Profile	0.045	0.061	0.025	-0.062	1	0.109	.327**	0.021

General	0.084	0.13	-0.103	-0.012	0.109	1	0.041	0.083
Mental								
Health								
Profile								
General	-0.063	0.041	-0.005	0.031	.327**	0.041	1	0.044
Lifestyle								
Profile								
General	-0.063	0.088	-0.012	0.059	0.021	0.083	0.044	1
Financial								
Status								
Profile								

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

Source: Author compilation

As per Pearson correlation, Table 6 depicts that there is a high positive significance found with the Age range of stock market traders being correlated with marital status as well as years of experience in stock market trading. Education did not have any association with the demographics neither with General Trading stress, mental well-being, lifestyle, and financial status profiles of stock market traders. Marital status showed positively high significance with Age range at .500** and stock market experience at .504**, respectively. Stock market trading experience showed a highly significant correlation with age range at .508** and marital status at .504**, respectively. The variables like General Trading stress profile showed highly positive significance with the General Lifestyle profile.

In contrast, the mental well-being profile did not show any correlation with the demographic variables as well as with the totals of core variables like General trading stress, lifestyle, and financial status profiles of stock market traders. The general lifestyle profile showed high significance only with the General trading stress profile. The general financial status profile of the stock market tracers did not show any significant correlations with the demographic variables like age range, education, marital status, and stock market trading experience nor with the core variables like general trading stress profile, mental well-being profile, and lifestyle profile of stock market traders. All demographic and core variables resulted in significant

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

positive and negative correlations and also having interrelated correlations with most of the factor items in each core dimension as well as with other dimensions too.

Regression

Simple linear regression is used to find the influence of demographics and core dimensions on the Stock Market trading experience as a dependent variable.

Table 7: Stock Market Trading Experience with General Demographic Variables

Variable	R	R ²	Adjusted r ²	В	F	Sig
Age range	.508ª	.258	.253	.481	47.970	.000
Marital status	.504ª	.254	.249	.925	46.971	.000

Source: Author compilation

Table 8: Stock Market Trading Experience with core dimension Variables

Variable	R	\mathbb{R}^2	Adjusted R ²	β	F	Sig
General Trading Stress Profile	.062ª	.004	003	-0.005	.464	Not significant
General Mental Health & Well Being Profile	0.012 ^a	0.000	007	-0.001	.886	Not significant
General Lifestyle Profile	0.031a	.001	006	.001	.716	Not significant
General Financial Stress Profile	0.059 ^a	.003	004	.030	.492	Not significant

Table 8 shows that demographic variables like Age range and marital status significantly influence the stock market trading experience. Even while analyzing the influence of demographic variables like age range, education, marital status, and stock market trading experience while core dimension factors like trading stress profile, lifestyle profile, financial stress profile had shown less impact and significance on mental health and well-being on the stock market traders. We have taken stock market trading experience as a dependent variable

too, as to find the influence on all the variables like demographic influencers as well as core stressors like trading, lifestyle, and financial related are easy to handle with levels of experience. Two general questions related to their physical health problems and their stress due to daily habits in relation to their age and years of stock market experience are taken.

Limitations

Administering a questionnaire for the entire stock market traders in all the regions of the country is an impossible task. This study has drawn a sample covering major and active trading regions of India. Due to time constraints, some traders could not complete the questionnaires even if they showed interest. Hence their data is not considered for the study.

Scope for future

We have not taken the actual worry and stress factors, which lead to depression and suicidal ways due to many reasons which reflect the low mental health of a trader where there can be a scope for in-depth study.

Conclusions

This study analyzed demographic variables like age range, education, marital status, and years of experience of stock market traders with core variables like trading stress profile, mental health/well-being, lifestyle profile, and financial status profile of traders. Results show that the age group 41-50 years showed more prone to habits. Traders with above five years' experience showed more in all physical health issues except eye disorders exceeded with 1-3 years category. High stress and pressure are found in the age group with 31-40 years, followed by all physical health issues with shoulder pain found maximum with traders 41-50 years. The correlations resulted in age range with marital status and years of stock market trading experience. General Trading stress profile correlated with the general lifestyle profile of the stock market trader. However, the Mental health well-being profile showed individual correlation with every factor in core variable dimensions. However, it did not show significance

in overall totals of core dimensions, which makes sense that it has influence and influences all the other core variables in the routine of the trader. Regression shows the significant impact of age range and marital status on the years of experience of the stock market trader, while the core variables deliver no significance. Overall, the mental health of the stock market trader influences the mental well-being dimensions individually and are significantly correlated.

References

- 1. Agrrawal, P., Waggle, D., & Sandweiss, D. (2017). Suicides as a response to adverse market sentiment (1980-2016). *PLoS ONE*, *12*(11). doi:10.1371/journal.pone.0186913
- 2. Banerjee, A., & Banerjee, A. (2019). Does trade size restriction affect trading behavior? Evidence from Indian single stock futures market. *J Futures Markets*, 1-19. doi:10.1002/fut.22073
- 3. Barber, B., & Odean, T. (2000). Trading Is Hazardous to Your Wealth: The Common Stock Investment Performance of Individual Investors. *The Journal of Finance*, *LV*(2), 773-806.
- 4. Bashar, A., & Hammash, F. (2017). Are Amman Stock Exchange Investors Overconfident? *International Journal of Economics and Financial Issues*, 7(2), 7-10.
- 5. Caitlin, Z. (2004). The Productive Life of Risk. *Cultural Anthropology*, 19(3), 365–391.
- 6. Chen, C.-C., Lin, Y.-T., Liu, T.-C., & Chen, C.-S. (2016). Economic Stress and Mental Health: The Relationship Between the Stock Market and Neurotic Disorder Doctor Visits: Economic Stress and Mental Health. *Stress and Health*, *32*(5), 607-615. From http://doi.wiley.com/10.1002/smi.2677
- 7. Corbet, S., Larkin, C., & McMullan, C. (2020). The impact of industrial incidents on stock market volatility. *Research in International Business and Finance*, 52. doi:10.1016/j.ribaf.2019.101125
- 8. Cox, R., Kamolsareeratana, A., & Kouwenberg, R. (2019). Compulsive Gambling in the Financial Markets: Evidence from Two Investor Surveys. *Journal of Banking and Finance*. doi:10.1016/j.jbankfin.2019.105709
- 9. Dorn, A., Dorn, D., & Sengmueller, P. (2014). Trading as Gambling. *Management Science*, 1-18. doi:10.1287/mnsc.2014.1979
- 10. Engelberg, J., & Parsons, C. (2016). Worrying about the stock market: Evidence from hospital admissions. *Journal of Finance*, 71(3), 1227-1250. From http://rady.ucsd.edu/faculty/directory/engelberg/pub/portfolios/HEALTH.pdf
- 11. Fernández, J., Augusto, J., Seepold, R., & Madrid, N. (2010). Why Traders Need Ambient Intelligence. *Ambient Intelligence and Future Trends-International Symposium on Ambient Intelligence (ISAmI 2010)* (pp. 229-236). Berlin, Heidelberg: Springer.
- 12. Fünfgeld, B., & Wang, M. (2009, February). Attitudes and behaviour in everyday finance: evidence from Switzerland. *International Journal of Bank Marketing*, 27(2), 108-128. doi:10.1108/02652320910935607

- 13. Giulietti, C., Tonin, M., & Vlassopoulos, M. (2020, March). When the market drives you crazy: Stock market returns and fatal car accidents. *Journal of Health Economics*, 70(102245). doi:10.1016/j.jhealeco.2019.102245
- 14. Griffith, J., Najand, M., & Shen, J. (2019). Emotions in the Stock Market. *Journal of Behavioral Finance*. doi:10.1080/15427560.2019.1588275
- 15. Kamstra, M., Kramer, L., & Levi, M. (2000, September). Losing Sleep at the Market: The Daylight Saving Anomaly. *The American Economic Review*, *90*(4), 1005-1011. From https://pubs.aeaweb.org/doi/pdf/10.1257/aer.90.4.1005
- 16. Kaplanski, G., Levy, H., Veld, C., & Veld-Merkoulova, Y. (2013). Do Happy People Make Optimistic Investors? From https://dspace.stir.ac.uk/bitstream/1893/11986/1/Veld-Merkoulova_2013_Do_Happy_People_Make_Optimistic_Investors.pdf
- 17. Khan, M., Tan, S.-H., & Chong, L.-L. (2017). Active trading and retail investors in Malaysia. *International Journal of Emerging Markets*, 12(4), 708-726. doi:10.1108/IJoEM-03-2016-0063
- 18. Kumar, A., Page, J., & Spalt, O. (2011). Religious beliefs, gambling attitudes, and financial market outcomes. *Journal of Financial Economics*, 671-708. doi:10.1016/j.jfineco.2011.07.001
- 19. Lan, Q., Xiong, Q., He, L., & Ma, C. (2018, August). Individual investment decision behaviors based on demographic characteristics: Case from China. *PLoS ONE*, *13*(8). doi:10.1371/journal.pone.0201916
- 20. Liu, B., Govindan, R., & Uzzi, B. (2016, January 16). Do Emotions Expressed Online Correlate with Actual Changes in Decision-Making?: The Case of Stock Day Traders. *PLoS ONE*, *11*(1). doi:10.1371/journal.pone.0144945
- 21. Livingston, J. (2009). Suicide, Risk, and Investment in the heart of the African Miracle. *Cultural Anthropology*, 24(4), 652–680. doi:10.1111/j.1548-1360.2009.01043.x
- 22. Lo, A., Repin, D., & Steenbarger, B. (2005). Fear and Greed in Financial Markets: A Clinical Study of Day-Traders. From http://www.nber.org/papers/w11243
- 23. Ma, R., Zhang, Y., & Li, H. (2017). Traders' behavioral coupling and market phase transition. *Physica A*, 618-627. doi:10.1016/j.physa.2017.05.072
- 24. Manahov, V., Soufian, M., & Hudson, R. (2014). The Implications of Trader Cognitive Abilities on Stock Market Properties. *Intell. Sys. Acc. Fin. Mgmt*, 21, 1-18. doi:10.1002/isaf.1348
- 25. Mark, F.-O., Lins, J., Vohra, S., Richards, D., Davies, G., & Schaaff, K. (2012). Emotion regulation and trader expertise: heart rate variability on the trading floor. *Journal of Neuroscience*, *5*(4), 227-237. From https://oro.open.ac.uk/34212/1/2012-0041R.pdf
- 26. McInerney, M., Mellor, J., & Nicholas, L. (2013). Recession depression: Mental health effects of the 2008 stock market crash. *Journal of Health Economics*, 1090-1104. doi:10.1016/j.jhealeco.2013.09.002
- 27. Pernilla, A. (2008, February). Happiness and health: Well-being among the self-employed. *The Journal of Socio-Economics*, *37*(1), 213-236. doi:10.1016/j.socec.2007.03.003

- 28. Phan, T., Rieger, M., & Wang, M. (2018, August). Survey data on Vietnamese retail investors' trading behavior and their psychological and behavioral patterns. *Data in Brief*, *19*, 1176-1180. From https://doi.org/10.1016/j.dib.2018.05.113
- 29. Sane, R. (2019). Stock market trading in the aftermath of an accounting scandal. *Emerging Markets Review*, 40. doi:10.1016/j.ememar.2019.100627
- 30. SEBI. (2015). SEBI Investor Survey. SEBI.
- 31. SEBI. (2018). *Discussion Paper: Increase in Market Hours of Trading in Exchanges*. From https://www.sebi.gov.in/sebi_data/attachdocs/1290076747642.pdf
- 32. Siddalingaiah, H. (2017). Sleep problems: an emerging public health issue. *International Journal Of Community Medicine And Public Health*, *4*(12), 4386-4388. doi:10.18203/2394-6040.ijcmph20175309
- 33. Sudhakar, K., Naganjaneyulu, S., & Rama Mohan, Y. (2018, February). A Survey on Computer Automated Trading in Indian Stock Markets. *IJMPERD*, 8(1), 531-540.
- 34. Sultana, N., & Ramarathinam, A. (2020, May 2). *Demat accounts gain currency in FY2020 as retail investors took to equities*. From Live Mint: https://www.livemint.com/news/india/new-demat-accounts-at-record-high-in-fy20-as-retail-investors-took-to-equities-11588336872289.html
- 35. Wong, W., Lee, J., Ho, F., Li, T., Ip, P., & Chow, C.-B. (2017). Stock Market Fluctuations and Self-Harm among Children and Adolescents in Hong Kong. *International Journal of Environmental Research and Public Health*, *14*(6). doi:10.3390/ijerph14060623