Comparative analysis of financial literacy and behavioral control on the household wealth of Generation Y (with special reference to Uttar Pradesh)

Abstract

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Introduction

The present study is based on the generational cohort segmentation with special reference to Gen Y. The financial literacy level and the behavior of the said generation is studied with the help of literature review and observations which are exploratory in nature. The descriptive research design is used to analyse the comparative effects of financial literacy and behavioral control on the household wealth of Gen Y.

Age old proverb – 'Birds of same feather, flock together' has already been put to good business use. This proverbial diatribe is exhorted to decipher the spending pattern of different market segments. The quite popular, new-fangled way of market segmentation is grouping customers on the basis of generational cohort. Generational cohort segmentation is grouping customers on the basis of the year bracket in which they are born. It caters to all four forms of segmentation which is demographic, behavioral, psychographic and geographic. Demographic segmentation defines the generation in terms of age, sex, family size etc. Behavioral segmentation is based on decision-making and pattern of behavior displayed by the generation. Psychographic segmentation refers to the lifestyle preferred by the generation and geographic segmentation represents the generation in segments of different locations.

(Manheim, 1952) examined that the human resource development was followed by generational cohort grouping. He studied that generation is a social construction of people with the same age and experience. The age brackets in generational grouping is made up of almost 20 years. The people belonging to one generation have their birth year in the common twenty year bracket with similar social and historical dimensions. (Ryder, 1965) explained that the generation is nothing but an aggregate of individuals experiencing same thing at the same time. (Kupperschmidt, 2000) defined generation as a group of individuals that can be identified on the basis of birth year, age, location and significant events influencing their growth.

The reason we do market segmentation taking a generation altogether, is to cater to millions of people at one go based on the generational commonalities. However, it is true that only the time period in which one is born cannot govern the personalities and choices of an individual but indeed one will be affected by the technology, political environment, socio-economic conditions, parenting styles and educational philosophies that the childhood witnessed at that time. Thus, these macro factors differentiate one generation from the other and demand distinct market strategies for every cohort.

(Jackson, Stoel and Brantley, 2011) investigated that the social, political and economic conditions at the macro level, predominant in the pre adult age of any cohort will result in the specific personality shaped by the values, behaviour, beliefs and expectations. This very characteristic personality is carried throughout the life.

Generation Y

The subject of the research in context of this study is Generation Y, popularly known as Millennials. The term 'Millennial,' was minted and coined by William Strauss and Neil Howe in 1987. They introduced the terminology in their book entitled 'Generations' which had American History charted in the form of sequential cohort biographies.

Household wealth

The population of India constitutes around one fifth of the entire world population. Moreover, India alone has 460 million millennials or Gen Y'ers which constitutes around 34 % of the population of India. Thus, it becomes imperative for the researchers to study the personal, household wealth of the Indian millennial population from a global point of view. Wealth is a non-exhaustive indicator of welfare. Household wealth supplies the financial resources to different sectors of the economy to do gross investments. The economy of a country grows with the movement of the financial assets and liabilities of households. Sixty percent of gross savings of the Indian economy is contributed by the households alone. Household wealth is the consistent and self-sustainable source to finance the India's economic structure.

There are two school of thoughts for the definition of household. According to Indian system of National Accounts (CSO, 2012), "Household sector includes individuals, unincorporated establishments like sole proprietorships and partnerships, non-profit organizations like educational institutes, trusts, NGOs, etc., and other non-government, non-corporate enterprises like farm and non-farm business." According to the UN System of National Accounts 2008, only those individuals sharing the common accommodation can be termed as household. It is a group of people living together under the same roof and sharing food from the same kitchen. Those individuals contribute money from their income or wealth and claim their rights on the resources of the household. In this manner, the non-profit organizations get excluded on their own.

Indian household sector has always been in 'an upward leveraging cycle' with leverage ratios also at higher levels. Indebtedness in Indian household sector is continuously on the rise post-recession recovery period of the year 2010. The alarming increasing rate of these ratios especially debt to income ratio is due to high consumption which is more than the disposable income since the financial year 2010-11. In the year 2017, RBI investigated that the Indian household has been borrowing more frequently from non-institutional credit sources.

In the lending portfolio of the banks, there have been a substantial jump in the share of personal loans and credit cards. Both of them are unsecured loans with no collateral security. Any default in the repayment is detrimental for both the financial health of the household as well as for the economy. Household wealth has come down in a significant manner after the financial crisis.

Financial Literacy

Financial markets have evolved in the last one decade due to rapid economic and technological advancements. (Mooney, 2008) has examined the importance of consumer's education with the ever increasing array of complex financial products, services and providers. The relative inexperience of the consumers with the escalating complexity of financial products and services may prove detrimental to their financial judgement. Financial knowledge deficient individuals may harm their families as well as the community by taking poor financial decisions. This void and illiteracy pertaining to finance can be a function of lack of access and fear. Financial literacy is important for youngsters as they are new to the world of personal finance. (Duguay, 2001) has studied that the financial literacy can help youngsters to avoid any financial loss. Fifty percent of the informal financial education is done at home. Very few people get the formal financial education at school or in higher education. Fortunate few have the opportunity to get acquainted with the complex financial products and services by their financial providers. Financial education courses are still optional elective courses in higher education. Most of the courses did not necessitate the presence of financial literacy programs in their course structure. Perhaps, the time has arrived when the financial institutions shall enhance their websites, mobile applications, infomercials, radio ads etc., with the informative offerings to cater to the need of financial knowledge of the consumers of all generations. This need identification gap can be filled by the financial institutions. Financial training can be explained as a form of action which enables the individual to gain full understanding of monetary or financial concepts, products and services. Financially educated individuals are more prepared for unforeseen situations like pandemic, recession and other volatile situations of the financial markets.

Continuous research is going on with respect to financial literacy. Although financial literacy is objective in nature but (Tang & Baker, 2016) examined that "the objective financial knowledge is important but insufficient driver in terms of exhibiting responsible financial behavior". The authors studied the importance of the subjective side of the financial literacy and proposed that the self-esteem is related to the financial behavior through subjective financial literacy in direct and indirect manner. Previous research have ignored the bi-dimensional nature of financial knowledge i.e., "what a person knows in actual is objective and what a person believes he knows is subjective. Two individuals with same objective financial knowledge shall hold different subjective evaluation of their knowledge". This leads to variation in the financial behavior. (Allgood & Walstad, 2013; Hadar et al., 2013) have examined that subjective financial knowledge is more effective in determining the financial behavior as compared to the objective financial knowledge. (Hadar et al, 2013) indicated that the "objective knowledge is more related to an individual's ability to make effective financial decisions for more responsible financial practice."

Financial education equip and empower the consumers with the required knowledge and ability to undertake wise decision while choosing the right financial product for enhancing the financial status of their families. A myriad of financial service providers and an array of financial products are available. When they are financially literate, it enables them to buy goods and services at a lower price. Eventually, it also helps in maintaining their household budgets, consume in proportion, managing their debt, save and invest strategically for their child's education and retirement planning. Thus, the government should roll out policies and measures for improving the delivery of financial advices for enhancing the financial literacy as the knowledge deficits are easier to handle than the problems related to attitudes and behavior.

(Kharchenko, 2011) summed up "financial literacy as numerical skills and basic economic conceptual clarity needed for wise, educated and informed savings and borrowing decisions".

Financial behavior

Much work has been done by the social scientists on finding the determinants of the financial wellbeing amongst the individuals of varied generation. They might not be successful in decomposing the completely exhaustive list of all the determinants but they have studied and understood the important role of financial knowledge and financial behavior. Financial behavior is subjective in nature. It is non -linear, non-parametric, irrational and time variant in nature. Thus, understanding the financial behavior is complex in nature.

Financial behavior is the behavior exhibited by the people while making financial transactions to create financial assets and liabilities for their household balance sheet. Financial transaction requires money that can be digital or non-digital. The financial transaction is an action which involves decision making. The decision making is a complex procedure based on the psychological characteristics of an individual. Financial behavior can be both positive and negative in nature (Woodyard, 2013). "Positive financial behavior includes savings for retirement, emergencies, cash management, risk management through insurance, credit management, real estate plans, long term and short term goals." The wise decision making determines the positive financial behavior. The positive financial behavior influences the financial well-being. Negative financial behavior includes behavior like over and frequent spending, not voluntarily saving for retirement and to avoid financial discussion. Financial behavior is a learned behavior starting with young adulthood and carried through later in life (Eccles, Ward, Goldsmith & Arsal, 2013).

Spending Behavior

(Carrier and Maurice, 1998) defined spending behavior as the behavior which is learned from parents and other individuals who are influential in one's life. It can be learned from the study that the spending behavior often passes from one generation to another. But, many other researchers have studied that other environmental conditions like technological advancements etc., are responsible for the over spending behavior of the millennials. (Lim et al, 2014) have studied about many young consumers burdened with debt due to over spending. He has also observed the dramatic shift from the ideology of 'Save money first and spend later' to 'Spend now, think later' and 'Own now and pay later'. (Wiggins, 2008) investigated that the credit cards are acting as a huge enabler due to its convenience for the over spending amongst the Gen Y'ers.

Savings Habit

(Loibl, 2011) defined savings habit as 'a behavior which is often practiced with or without awareness for setting aside funds for increasing the assets or reducing the liability. It is seen and learn through parents and other influencers since childhood. Many studies have proved that there exists a linear correlation between the positive spending behavior or savings habit and the financial wellbeing of the individual.

Behavioral Control

Behavioral control is controlling, modifying and altering the behavior of self in a right direction to get the desired results. The various non cognitive factors which govern the financial behavior are self-control, optimism, planning, far-sightedness, deliberative thinking etc.

Rationale

According to the available literature, the increasing number of people falling under Millennial generation cohort or Gen Y are facing financial distress and difficulties which is all set to further increase in the coming future. This is indeed worrisome as it is not limited to an individual but to an entire said generation. This will eventually incur huge costs for the entire financial system of the country as and when the generation multiplies. Thus it becomes a topic of pressing requirement.

Therefore, it becomes vital that we understand exactly why people land into financial trouble. The reason can be either due to the lack of financial knowledge or due to their own inherent behavior. Focus was solely on improvising financial literacy levels among the people. It becomes important to deduce the correct underlying reason to devise the solution for the same. Here comes the need to study behavioral factors such as an individual's perceived behavioral control capacity like discipline, self-control, patience, instant vs delayed gratification, planning, far sightedness etc., subjective norms like parent's influence, peer pressure and attitude. These factors also matter along with financial literacy and other demographics. Thus arises the need to analyze the comparative effects of financial literacy and behavioral control on the household wealth of Gen Y.

Significance of the study

The findings of the study will redound to the benefit of individuals pertaining to Gen Y, society and the economy of one's country by fostering the need of savings and investment by measuring the statistical significance of the financial literacy and the behavioral control on the household wealth. There is a need to understand the personal characteristics and the personal finance of the Gen Y'ers. The increasing financial distress amongst the said generation is detrimental for their growth as well as for the nation. The study will be significant as

- it will help the members of the said generation to save and invest for increasing their household wealth or asset and reducing their household debt.
- It will help in increased savings for the rainy days.
- It will help in understanding and preventing the financial distress.
- It will help the economy of the nation as household savings and investments will contribute towards the growth of financial institutions and the financial market.
- It will contribute towards the literature of financial literacy and behavioral control.

RESEARCH METHODOLOGY

The mixed method or the integrated research model entailing exploratory and conclusive/descriptive type of research is employed for the study. Descriptive research comprises of fact finding surveys of different kinds. In social science, it is also called ex post facto research in which there is no control on the variables. Things are reported the way they happened like frequency of shopping, preference of people. Exploratory research promotes development of hypothesis rather than testing.

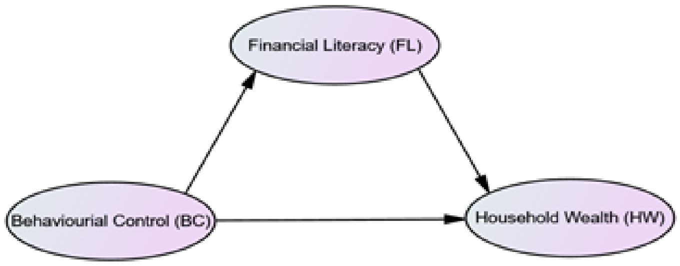
Objectives

1. To understand the behavioral characteristics and control of the Gen Y through extant literature.
2. To assess and approximate the financial literacy level amongst the Gen Y through mixed method of qualitative and quantitative research component.
3. To compare and contrast the effect of behavioral control and financial literacy level on the household wealth of Gen Y in a statistically significant manner.

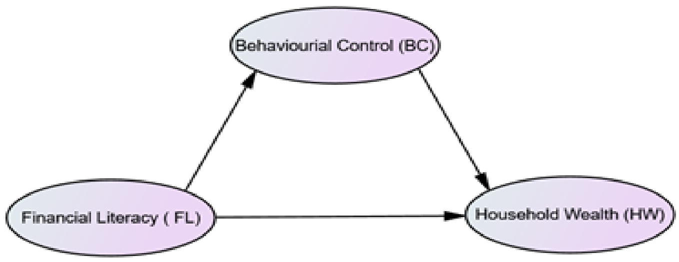
Proposed Research Model

The comparative research model is used in this study. The two cases to be compared are explained as below:

First case: The effect of one independent variable i.e., Behavioural Control is studied on the dependent variable of Household wealth on its direct path. Another independent variable i.e., financial literacy, when introduced on the direct path, exhibits a mediating effect and thereby alters the effect of the Behavioural Control on the Household Wealth. The mediating effect may be partial or full.



Second Case: The effect of one independent variable i.e., Financial Literacy is studied on the dependent variable of Household wealth on its direct path. Another independent variable i.e., Behavioural Control, when introduced on the direct path, exhibits a mediating effect and thereby alters the effect of the Financial Literacy on the Household Wealth. The mediating effect may be partial or full.



Thus, in the first case Financial Literacy Construct acts as a mediating variable and in the second case, the Behavioural Control Construct acts as a mediating variable. The aim of the research is to compare the mediating effect of both the constructs to know which construct of the two is more significant in influencing the dependent variable in partial or whole. The construct with more mediating effect will prove to be more significant in terms of accumulation of household wealth.

Formulation of Hypothesis

H01: There is no significant effect of Financial Literacy on the Household Wealth.
H_{11}: There is a significant effect of Financial Literacy on the Household Wealth
H_{02}: There is no significant effect of Behavioural Control on the Household Wealth.
H_{12}: There is a significant effect of Behavioural Control on the Household Wealth.
H_{03}: There is no significant effect of Financial Literacy on the Behavioural Control.
H_{13}: There is a significant effect of Financial Literacy on the Behavioural Control.
H_{04}: Behavioural Control does not mediate the relationship between Financial Literacy and Household Wealth.
H_{14}: Behavioural Control mediates the relationship between Financial Literacy and Household Wealth.
H_{05}: Financial Literacy does not mediate the relationship between Behavioural Control and Household Wealth.
H_{15}: Financial Literacy mediates the relationship between Behavioural Control and Household Wealth.
H_{06}: Financial Literacy has more mediating effect on Household Wealth in comparison to Behavioural Control.
H_{16}: Behavioural Control has more mediating effect on Household Wealth in comparison to Financial Literacy.

Population or Universe of the study

It consists of all the elements which qualify for inclusion in the research study. “The population of research is the entire group of people that the researcher wishes to investigate” (Sekaran, 2003). In this study, the universe of the study are all individuals belonging to the Gen Y with special reference to Uttar Pradesh. The age bracket of Gen Y is the sample frame of the study as it characterises individuals to get selected for inclusion to the universe of the study.

Sampling Method

Snowball sampling with **Criterion Sampling strategy** suggested by (Palys, 2008) was employed for the study. It involves searching for the subjects who meet certain criteria like belonging-ness to the defined age bracket, location, educated, employed, urban etc. “Snowball sampling is a type of non-probability, chain-referral sampling technique where existing study subjects recruit future subjects from among their acquaintances” (Anand et al., 2020). As the study is limited to the state of Uttar Pradesh only, the state was divided into KAVAL cities (Kanpur, Allahabad, Varanasi, Agra and Lucknow) for data collection. These cities were identified for data collection as they came out as winners for future smart cities in a national competition by Ministry of Housing and Urban Affairs, Government of India (Press Information Bureau, 2015). Moreover, these cities of UP have the regional and head offices of various government, public and private companies. They also act as business hubs. Thus, finding financially independent Gen Y was easy in KAVAL cities. 'The survey started with a small pool, comprising of initial respondents from our social groups and acquaintances who belonged to KAVAL cities of UP and were financially independent. They were invited to participate with a 'formal message or mail with due consent in the form of an explicit disclaimer to participate in the survey questionnaire'. They further nominated others who meet the eligibility criteria and who could potentially contribute to our study through their official and social networks. The inclusion criteria was financial independence. The initial data was received on 27.03.2021. The final data of 450 records was collected on 31.05.2020 with Google forms. The further data cleaning led to the final data collection of 408 respondents.

Unit of Analysis

The unit of analysis is individual respondent belonging to the Generation Y.

Sample size

This study collected its own data because the required data was not available. The size of the population of this research was not identified. Therefore, to determine the sample size, Slovin's formula with error standard of 5% was used. We have supposed that around 2000-3000 urban and financially independent individuals need to be surveyed from five KAVAL cities of Uttar Pradesh. 500 respondents were expected from each of the KAVAL cities. Thus, N is taken as 500*5 = 2500. A margin of sampling error of 0.05 was considered for the survey. Using Slovin's formula, we arrived at the required web sample survey size which is as follows:

'$\mathbf{n = N / (1 + Ne^2)}$;
where, n = sample size,
N = Total population
e = Error tolerance.
n = 2500/ (1+2500*0.052)
= 344.8

Thus, post rounding off the figure, we decided the sample size to be nearing 350 but we successfully received 408 responses.

Data Analysis Techniques

For reliability and factor analysis (Exploratory Factor Analysis), SPSS 23.0 version software is used whereas for the Construct validity, Confirmatory Factor Analysis, Measurement Model and Structural Equation Model, the add on feature of SPSS, that is AMOS 23.0 version is used. The confirmatory factor analysis is done for the finalization of each construct under the scale development and tool standardization. The nominal scale is used for demographics variables whereas the Likert 5 point is used for three constructs as Financial Literacy (FL), Behavioural Control (BC), and Household Wealth (HW). Model fit analysis and hypothesis testing involved the proposed research model being tested and modified by considering the goodness of fit of the model to the data. Hypothesis testing involved testing the direct path hypothesis and mediating hypothesis.

FINDINGS OF THE STUDY

After testing the hypothesis, it was found that Behavioral Control has full mediating effect whereas Financial literacy has partial mediating effect. Thus, behavioral control has stronger impact on the household wealth accumulation of Gen Y. Since a full mediation by the mediating variable of behavioural control exists, the independent variable of financial literacy exerted its total influence with and through the mediating variable. If we remove the mediator, the significant relationship between the Dependent Variable and the Independent Variable disappears. Thus, the effect of behavioural control becomes significant for the sound financial health and well-being of the millennial household.

SUGGESTIONS AND MANAGERIAL IMPLICATIONS

Since, it has been found and validated that the behavioural control has more impact on the household wealth of Gen Y, policies need to be made in order to control and motivate the behaviour of Gen Y for the desired household wealth accumulation.

The theory of 'The Carrot and Stick' for Behavioral Control

It can be applied to motivate Gen Y to save and invest. This motivational theory is based on the 'principles of reinforcement' and is given by a philosopher Jeremy Bentham, during the industrial revolution. "This theory is derived from the old story of a donkey, the best way to move him is to put a carrot in front of him and jab him with a stick from behind."

Carrots

- Creating awareness about Tax Benefits and Tax-free interest on long term savings and retirement funds like PPF etc.
- Old tax regime should be encouraged by the employers as it favors investment rather than mere slabbing.
- Value added services like cash backs, reward points, bundled products like free insurance and riders, freebies like health checkup with medical insurances etc. can be rewarding for the Gen Y.
- Financial counselling from time to time with the help of both human and artificially intelligent bots should be encouraged.

Sticks

- Commitment accounts with large lock-in period and high penal interest to discourage frequent withdrawals.
- Fear appeal campaigns to encourage savings and investment for rainy days by making them realize the importance of savings for conditions like job insecurity, lack of social security, unpredictable economic environment, recession, pandemic, state of war, health hazard, disability and death.
- Very high penal interest charges should be levied.
- CIBIL scores for credit defaults should be continuously updated.
- Credit limit ceiling with respect to declared earnings should be fixed from time to time.
- Automated deduction from the earning's account to investment account can promote and foster savings.

Financial Literacy awareness Campaigns

- Top management of various business organisations should take the initiative to financially educate their employees. They should make them aware of the basic financial know how to keep themselves financially sound. This initiative will instil loyalty in the employees for their organisation.
- Enhancing the customer retention by Financial Institutions through knowing the customer in terms of their behaviour, literacy and income bracket. Only when we know the customer, we can curate products for high customer satisfaction and loyalty.
- Financial institutions and policymakers should curate financial products that can provide personalised financial education to control subjective behaviour through bundled programs. It can be done with the help of infomercials on television, radio ads, self-service modules on web pages, artificially intelligent applications on smart phones and other decision support tools.
- "Contactless-ness is the new normal". Therefore, digital literacy becomes imperative for the overall financial literacy in the world of digital disruption with technologies like machine learning, artificial intelligence, internet of things (IoT) etc. Self-service technologies are offered by financial institutions like passbook printers, cash deposit and withdrawal ATMs, no touch card withdrawals up to Rs. 2000/- without PIN, positive pay system for conforming the cheques etc.,

Contribution to the existing literature

The study contributes to the scant research on the comparative effect of the behavioural control and financial literacy on the household wealth of Gen Y. There was paucity of literature pertaining to the same. The findings of the study will be applicable in similar economies where the said generation is facing immense financial distress.

Limitations & Future scope of the study

- The present study is limited to urban members of Gen Y. The future study may include the rural Gen Y also.

- The comparative study of Gen Y with Gen X and Gen Z can be done at a later stage.
- We do believe that the results of our study are indicative of more robust models of consumer financial behaviour that can be developed and extended using more advanced machine learning algorithms.
- We are in quest of continuous innovation of exploring further refinements with broader datasets in on-going research.