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Perceived Impact of Financial Inclusion Schemes and Income level: Empirical Evidence from Haryana

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ABSTRACT

Background: It was noted that many countries have revealed ade-quate increase in terms of including its citizens in main financial streamline; however, it is a matter of investigation how people in India perceive the impact of financial inclusion schemes offered by government agencies.

Purpose: The present study aims to study the perceived effect of financial inclusion schemes; and to link the perceived effect of financial inclusion schemes with income level of Haryana respondents.

Methods: For this, the study has collected data from 400 respond-ents that were used in the final data analysis and this sample size seems to be truly representing the select state's population. The researcher considered 6 administrative divisions of all districts in data collection. To make sure rural and urban areas, as well as men and women, are equally represented, the sample size was divided according to Census 2011 distribution.

Results: Findings of the study indicated that Haryana people have positive perceptions towards the impact of financial inclusions schemes. Findings highlighted that financial inclusion schemes have significantly improved social status; self-efficacy; financial status; and self-respect and self-confidence among Haryana people.

Conclusions: The study concluded that higher income respondents have greater social status; better self-efficacy; increased financial status; and improved self-respect and self-confidence in compari-son to lower income respondents.

1. Introduction

Recently, India has shown a significant improvement in undertaking efforts to enhance the level of financial inclusion by opening bank branches in rural areas and reaching out to marginalized communities living in remote areas of the country. The government, both at central and state levels, has launched different products such as opening zero balance accounts for underprivileged consumers; however, the inclusion of such people in the main financial stream still remains a herculean task for government institutions. Data suggested that millions of underprivileged consumers have opened zero-balance accounts in PSU banks under 'Jan-Dhan Yojana' scheme of the central government; however, usage of these accounts is still very low among bottom level population. For instance, in India, around half of such accounts are not being used for more than one year. It has been noted that there are significant differences in the levels of financial inclusion among people across states. Haryana ranks lower in the northern region. According to the RBI state finance report in 2019, Haryana stands at the 22nd position in terms of financial inclusion level. Even though Haryana is performing better on the supply side of financial services, the demand side remains a point of concern for achieving the expected results.

Technology advancement has played an important role in expanding financial inclusion among underprivileged consumers. Gender inequality, financial literacy, and financial status are barriers to reach the target level. Many studies have been conducted to measure the progress on the supply side, considering branch penetration, number of accounts, and cash deposits in a particular region or section of society. Very few studies have focused on the usage of accounts, quality of services provided, and the level of financial literacy. These indexes are important to measure the correct level of financial inclusion in Haryana. Measurement of the effects of socio-economic factors will help policymakers and financial institutions to design products according to customer requirements (Golait, 2019).

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Like other financial terms, financial inclusion has also been defined by various institutes and countries globally. According to the reports of World Bank (WB), financial inclusion refers to an easy access to low-cost financial products/services that are affordable to people at lower strata of the society so that such populations receive financial services sustainably (World Bank Org, 2018). Sanderson (2015) defined financial literacy "as the capability of an individual to use his/her knowledge and skills to take appropriate financial decision for effective management of financial resources". This term is little modified according to the need of various countries. In India, RBI introduced this term in 2005. Financial inclusion may also be defined as "the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low-income groups at an affordable cost" (Demirg-Kunt et al., 2015). As per Reserve Bank of India (RBI) guidelines, financial services essentially include services that are offered by banks, insurance companies/firms, equity products/services offered by financial institutions for people belonging to underprivileged sections of the society (Reddy, 2006).

An observation by an international bank (World Bank Org, 2013) indicated that half of the adult (more than 2.5 billion) population of the world does not have an account with formal financial institutions. While it is a rising concern for the global economy and reveals the lack of demand for banking services impacted by travel, cost, distance, and paperwork, there is an opportunity to strategize the inclusion of poor households for banking services. World bank has developed a strategy aiming to improve the level of financial inclusion among developing and underdeveloped nations (Demirg-Kunt et al., 2015). These policies have proven to be successful in promoting financial inclusion and have yielded some good results. According to a survey conducted in the year 2017, the number of people not connected with banks has reduced to 1.7 billion, and more than 1.2 billion people have been connected to mobile accounts since 2011. The proportion of people with a bank account was about 50% in 2011, which increased to 62 % in 2014, followed by 69 % in 2017 (Demirguc-Kunt et al., 2018). In the light of the above discussion, it is noted that many countries have revealed a significant increase in terms of including their citizens in the main financial stream; however, it is a matter of investigation how people in India perceive the impact of financial inclusion schemes offered by government agencies. It is also important to know how people's perception of the impact of financial inclusion schemes is determined by their income level. Therefore, the present study aims to achieve the following objectives:

1) To study the perceived effect of financial inclusion schemes among people of Haryana.
2) To examine the link between the perceived effect of financial inclusion schemes and income level of respondents in Haryana.

2. Review of literature

Ramakrishnan (2010) found that financial inclusion is the best practice for inclusive growth. It explained the need for banking and insurance services to hold a key place in inclusive growth. Inclusive growth objectives can be achieved only by providing a wide range of financial services. Kushalakshi & Raghurama (2014) revealed the impact of financial inclusion in a rural area. It further detailed the impacts on women's empowerment. This study highlighted the need to understand customer requirements for developing new business models. Customer-focused approach and programs will enhance the financial inclusion and financial status of the poor and excluded population. Raj (2011) pointed out that financial inclusion not only helps people to improve their financial condition but also helps banks to raise funds. There is a need to move from traditional methods to new innovative and low-cost options. Regional-specific requirements should be considered while developing or delivering new schemes.

Choithrani (2013) highlighted that access to financial services for the excluded sections of the society such as the poor and people in remote areas, is a must to improve the poverty index in India. The most important factor for sustainable development and economic growth is financial growth. This paper further detailed initiatives taken by RBI, their impact, and the challenges faced. Dhar (2013) analyzed the union budget published by the government of India for three consecutive years and calculated financial inclusion in India. The primary focus was on the poor section of the society who does not enjoy the financial services due to various reasons like lack of literacy, accessibility, etc. Branchless operations in banking services, facilitated by bank representatives who can directly engage with people without requiring them to visit a physical bank, will enhance accessibility to financial services. The utilization of banking technologies and improvement in financial literacy levels can be achieved through these representatives.

Sidhnani (2019) studied bankers' perceptions regarding financial inclusion in India. Though bankers are aware of banking technology, there is a desire to enhance knowledge of new technology and its usage in different working scenarios. Increasing financial literacy among rural/remote population will further enhance financial inclusion. The quality and security of financial technologies and services is a concern among customers. Though this study focused on important aspects of measuring financial inclusion, it was conducted solely to measure banker's perceptions. Virender (2016) described banker's perceptions from selected banks. This study was in line with a study done by Sidhnani (2019) in terms of awareness of financial technologies by bankers. Furthermore, this study revealed the necessity for improvement in regulatory policy, transparency of transactions, skill enhancement of bankers, and the adoption of a focused business model for financial institutions. However, it is essential to note that this study was limited to employees from a select few banks.

3. Research Methodology

Research methodology can be defined as a sequence of logical and systematic steps to achieve the objectives of the research. The methodology ensures consistency in procedures and objectives to provide better reliability in results. Research design is a conceptual framework to conduct the research. This research will employ a descriptive approach using survey techniques. A quantitative method will be adopted to gather primary data through a structured questionnaire. Secondary data will be sourced from government of India reports. The state of Haryana encompasses a vast physical area and has a population of 2,53,50,000 according to the 2011 census. Haryana comprises 22 districts divided into 6 administrative blocks.

The adult population of Haryana will be considered for conducting this research. All calculations will be based on the population distribution according to the 2011 census. The target population for this study will be 1,65,79,503. The sample size will be calculated using Solvin's formula, which is given below:

$$N = P/(1+Pe2)$$

where,
N = Sample size
P = Population
e = Margin of error.

Using the aforementioned formula, the sample size is calculated as 16579503/(1+16579503*(0.05)*(0.05)) = 400. Therefore, this study collected data from 400 respondents for the final data analysis. This sample size appears to accurately represent the population of the selected state.

3.1. Data Collection

The State of Haryana encompasses a wide physical area, making it impractical to collect data from all districts. Therefore, the researcher will focus on the 6 administrative divisions across all districts for data collection. To ensure equal representation of rural and urban areas, as well as men and women, the sample size will be divided according to the distribution outlined in the 2011 Census.

According to the 2011 Census, 65 percent of the population resides in rural areas while 35 percent resides in urban areas. The male and female populations account for 53 and 47 percent, respectively.

Table 1: Projected numbers for each block for data collection.

Division	Male		Female		Total
	Rural	Urban	Rural	Urban	
Ambala	21	11	19	10	61
Faridabad	27	14	24	13	77
Gurugram	18	10	16	9	53
Hisar	24	13	21	11	69
Karnal	21	11	18	10	60
Rohtak	28	15	25	13	81
Total	138	74	122	66	400

3.2. Hypothesis Development

The present study has measured the perceived impact of financial inclusion schemes using four statements: improvement in social status; better self-efficacy; increased financial status; and improved self-respect and self-confidence. These statements were measured with the help of five-point Likert scale and mean score of these statements was compared against scale's mid value '3'. The study used one-sample t-test to compare actual mean score with scale's mid value. For this, following null hypotheses were developed:

H0(1): There is no relationship between financial inclusion schemes and social status for Haryana people.

H0(2): There is no relationship between financial inclusion schemes and self-efficacy for Haryana people.

H0(3): There is no relationship between financial inclusion schemes and financial status for Haryana people.

H0(4): There is no relationship between financial inclusion schemes and self-confidence for Haryana people.

3.3. Findings and Hypotheses Testing

In the present study, respondents were requested to divulge their demographic details including their age, occupation, education and income level etc. For 'age' variable; data were coded in SPSS in which '1' represented 18-25 years; '2' represented 26-35 years; '3' represented 36-45 years; '4' represented 46-55 years and '5' represented more than 55 years. For 'occupation' variable; data were coded in SPSS in which '1' represented farmer; and '2' represented job; '3' represented business and '4' represented labor. For 'education' variable; data were coded in SPSS in which '1' represented illiterate; and '2' represented below SSLC; '3' represented SSLC; '4' represented HSC; and '5' represented graduate. For 'annual income' variable; data were coded in SPSS in which '1' represented less than Rs. 250000 per annum; and '2' represented Rs. 251000 to Rs. 500000 per annum; and '3' represented more than Rs. 500000 per annum. The frequency of respondents in respect to the above mentioned variables was calculated and presented in the following table:

Table 2: Demographic variables of the participants.

Variable	Categories	Frequency	Percent
Age	18-25 years	7	1.8
	26-35 years	34	8.5
	36-45 years	93	23.2
	46-55 years	168	42.0
	More than 55 years	98	24.5
Occupation	farmer	118	29.5
	Job	46	11.5
	Own Business	183	45.8
	Labour	53	13.2
Education	illiterate	59	14.8
	Below SSLC	37	9.2
	SSLC	89	22.2
	HSC	83	20.8
	Graduate	132	33.0
Annual income	Less than Rs. 250000	157	39.2
	Rs. 251000 to Rs. 500000	124	31.0
	More than Rs. 500000	119	29.8

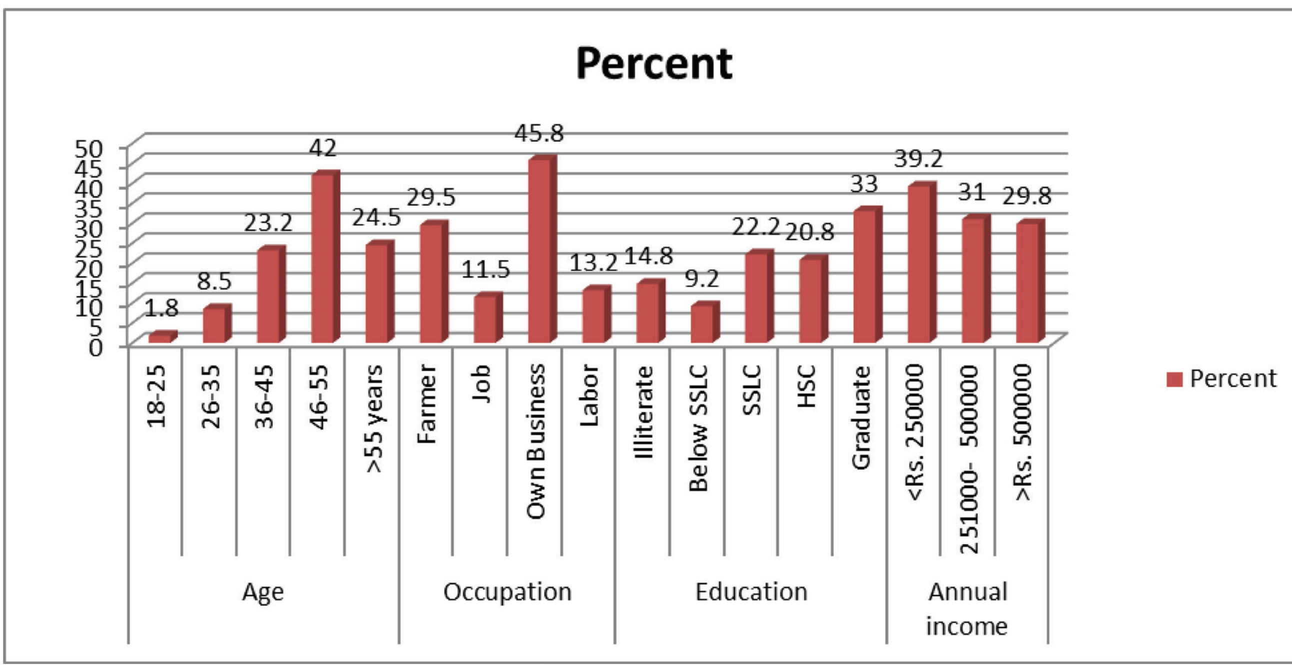

Figure 1. Graph of the percentage of demographic variables of participants.

The above graph revealed that 1.8% of the respondents were between 18-25 years; 8.5% were between 26-35 years; 23.2% were between 36-45 years; 42.0% were between 46-55 years and 24.5% were more than 55 years. Findings on the occupation of the respondents revealed that 29.5% were farmers; 11.5% were doing job; 45.8 owned a business and 13.2% were labourers. Findings on the education level of the respondents showed that 14.8% were illiterate; 9.2% were below SSLC; 22.2% were SSLC; 20.8% were HSC; 33.0% were graduates. Findings on the annual income of the respondents revealed that 39.2% were earning less than Rs. 250000; 31.0% were earning between Rs. 251000 to Rs. 500000; 29.8% were earning more than Rs. 500000.

3.4. Perceived Impact of Financial Inclusion Schemes

In the present study, respondents were asked to rate several statements regarding the impact of financial inclusion schemes. These statements were measured on a five-point

Likert scale ranging from strongly disagree to strongly agree. Data in this regard were coded from '1' to '5' according to the scale used for statements measuring the impact of financial inclusion schemes.

Table 3: Perceived Impact of Financial Inclusion Schemes.

Null hypotheses	**Mean score**	**t value**	**p value**	**Decision (Accept or reject)**
H0(1): There is no relationship between financial inclusion schemes and social status for Haryana people.	3.95	21.335	.000	Rejected
H0(2): There is no relationship between financial inclusion schemes and self-efficacy for Haryana people.	4.03	22.528	.000	Rejected
H0(3): There is no relationship between financial inclusion schemes and financial status for Haryana people.	3.84	19.113	.000	Rejected
H0(4): There is no relationship between financial inclusion schemes and self-confidence for Haryana people.	3.96	23.455	.000	Rejected
Source: Primary data				

The table revealed that all null hypotheses were rejected, leading to the conclusion that people have perceived the impact of financial inclusion schemes. From H0(1), it was expected that there is no perceived impact of financial inclusion schemes on the social status of the people of Haryana. This hypothesis was rejected and it may be inferred that financial inclusion schemes have significantly improved the social status of the people of Haryana. From H0(2), it was expected that there is no perceived impact of financial inclusion schemes on the self-efficacy of the people of Haryana. This hypothesis was rejected and it may be inferred that financial inclusion schemes have significantly improved self-efficacy of the people of Haryana. From H0(3), it was expected that there is no perceived impact of financial inclusion schemes on the financial status of the Haryana people. This hypothesis was rejected and it may be inferred that financial inclusion schemes have significantly improved the financial status of the people of Haryana. From H0(4), it was expected that there is no perceived impact of financial inclusion schemes on the self-confidence of the people of Haryana. This hypothesis was rejected and it may be inferred that financial inclusion schemes have significantly improved the self-confidence of the people of Haryana.

3.5. Perceived Impact of Financial Inclusion Schemes and Income Level

The present study has attempted to establish a link between the perceived impact of financial inclusion schemes and the income level of the selected respondents. For this, one-way ANOVA was used, with income categories considered as independent variables and the perceived impact of financial inclusion schemes considered as dependent variables. Findings are given below:

Table 4: Perceived impact of financial inclusion schemes.

Perceived impact of financial inclusion schemes	**Income level**	**N**	**Mean**
Improvement in social status	Less than Rs. 250000	157	3.78
	Rs.251000 to Rs. 500000	124	4.05
	More than Rs. 500000	119	4.08
	Total	400	3.95
Better self-efficacy	Less than Rs. 250000	157	3.97
	Rs.251000 to Rs.500000	124	4.01
	More than Rs. 500000	119	4.13
	Total	400	4.03

Increased financial status	Less than Rs. 250000	157	3.61
	Rs.251000 to Rs.500000	124	3.98
	More than Rs. 500000	119	4.00
	Total	400	3.84
Improved self-respect and self-confidence	Less than Rs. 250000	157	3.86
	Rs.251000 to Rs.500000	124	4.02
	More than Rs. 500000	119	4.03
	Total	400	3.96

Table 5: ANOVA findings.

Perceived impact of financial inclusion schemes	Groups	Sum of Squares	df	Mean Square	F	Sig.
Improvement in social status	Between Groups	7.432	2	3.716	4.748	.009
	Within Groups	310.666	397	.783		
	Total	318.097	399			
Better self-efficacy	Between Groups	1.641	2	.820	.981	.376
	Within Groups	331.999	397	.836		
	Total	333.640	399			
Increased financial status	Between Groups	13.994	2	6.997	9.499	.000
	Within Groups	292.443	397	.737		
	Total	306.437	399			
Improved self-respect and self-confidence	Between Groups	2.591	2	1.296	1.943	.145
	Within Groups	264.769	397	.667		
	Total	267.360	399			

Table 6: Tukey HSD findings.

Dependent Variable	(I) Annual income	(J) Annual income	Mean Difference (I-J)	Std. Error	Sig.
Improvement in social status	Less than Rs. 250000	Rs.251000 to Rs.500000	-.265*	.106	.035
		More than Rs. 500000	-.292*	.108	.019
	Rs.251000 to Rs.500000	Less than Rs. 250000	.265*	.106	.035
		More than Rs. 500000	-.027	.114	.969
	More than Rs. 500000	Less than Rs. 250000	.292*	.108	.019
		Rs.251000 to Rs.500000	.027	.114	.969
Better self-efficacy	Less than Rs. 250000	Rs.251000 to Rs.500000	-.034	.110	.950
		More than Rs. 500000	-.152	.111	.361
	Rs.251000 to Rs.500000	Less than Rs. 250000	.034	.110	.950
		More than Rs. 500000	-.118	.117	.574
	More than Rs. 500000	Less than Rs. 250000	.152	.111	.361
		Rs.251000 to Rs.500000	.118	.117	.574
Increased financial status	Less than Rs. 250000	Rs.251000 to Rs.500000	-.371*	.103	.001
		More than Rs. 500000	-.395*	.104	.001
	Rs.251000 to Rs.500000	Less than Rs. 250000	.371*	.103	.001
		More than Rs. 500000	-.024	.110	.974
	More than Rs. 500000	Less than Rs. 250000	.395*	.104	.001
		Rs.251000 to Rs.500000	.024	.110	.974

Improved self-respect and self-confidence	Less than Rs. 250000	Rs.251000 to Rs.500000	-.164	.098	.216
		More than Rs. 500000	-.165	.099	.220
	Rs.251000 to Rs.500000	Less than Rs. 250000	.164	.098	.216
		More than Rs. 500000	-.001	.105	1.000
	More than Rs. 500000	Less than Rs. 250000	.165	.099	.220
		Rs.251000 to Rs.500000	.001	.105	1.000

*. The mean difference is significant at the 0.05 level.

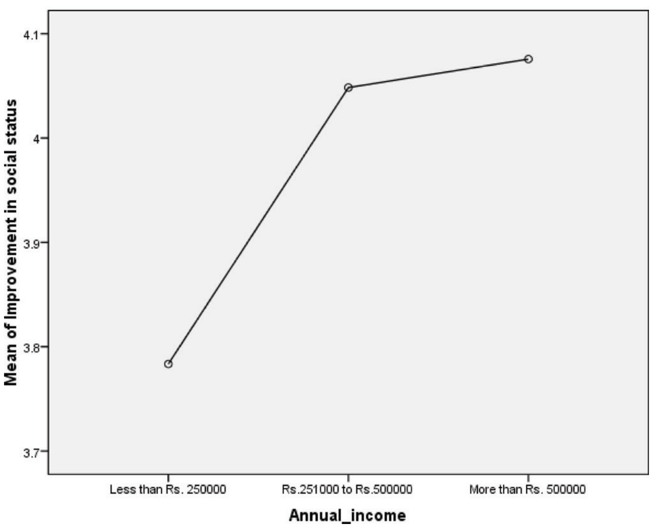

Figure 2: Graph between mean of improvement in social status V/S annual income.

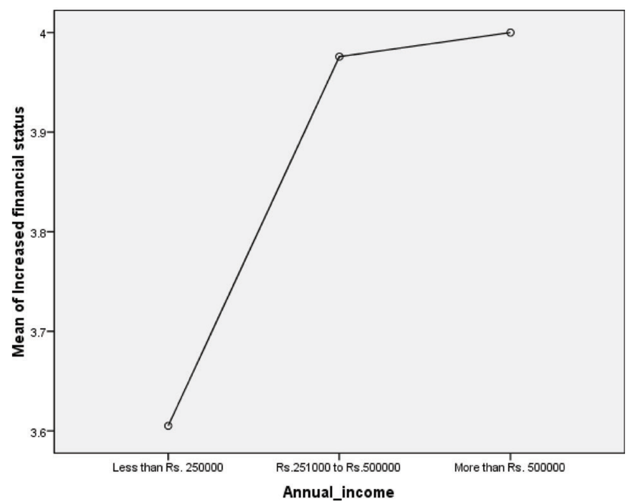

Figure 4: Graph between mean of increased financial status V/S annual income.

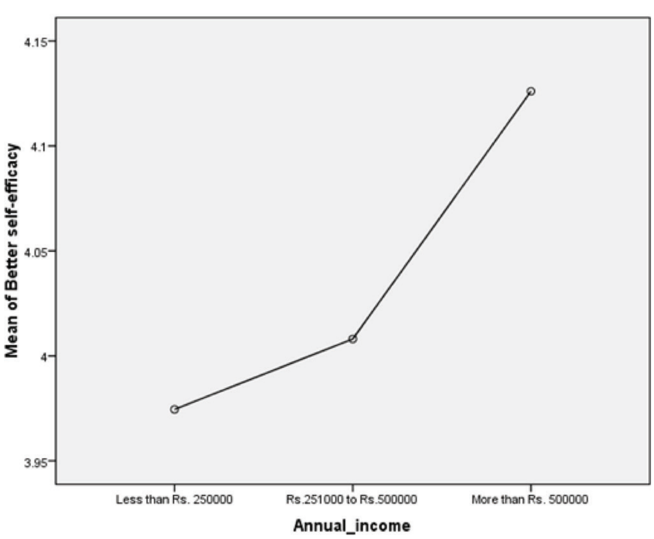

Figure 3: Graph between mean of better self-efficacy V/S annual income.

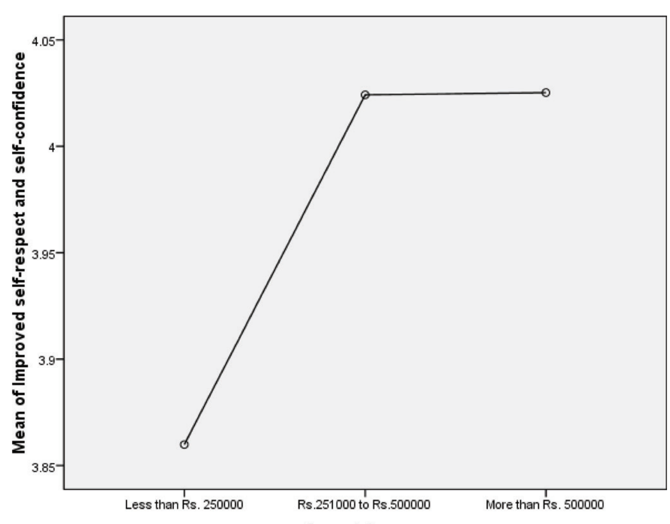

Figure 5: Graph between mean of improved self-respect and self-confidence V/S annual income.

The above table revealed that people with higher income levels were found to have greater perceptions of improvement in social status. It means that higher income respondents believe that their social status has improved with greater intensity in comparison to lower income respondents. Similarly, people with higher income levels were found to have greater perceptions of their self-efficacy. It means that higher income respondents believe that their self-efficacy has improved with greater intensity in comparison to lower income respondents. Further, people with higher income levels were found to have greater perceptions of their financial status. It means that higher income respondents believe that their financial status has improved with greater intensity in comparison to lower income respondents. Finally, people with higher income levels were found to have greater perceptions of their self-respect and self-confidence. It means that higher income respondents believe that their self-respect and self-confidence have improved with greater intensity in comparison to lower income respondents.

4. Summary and Conclusion

The findings of the study indicated that Haryana people have positive perceptions towards the impact of financial inclusions schemes. Findings highlighted that financial inclusion schemes have significantly improved the social status of Haryana people. It was important to note that financial inclusion schemes have significantly improved the self-efficacy of Haryana people. Similarly, the financial status of Haryana people was also found to be improved due to the financial inclusion schemes of the government. The self-confidence of Haryana people was reported to be increased due to financial inclusion schemes. In addition, findings highlighted that higher income respondents have greater social status; better self-efficacy; increased financial status; and improved self-respect and self-confidence in comparison to lower income respondents. Based on the findings of the study, it can be suggested that government institutions need to enhance accessibility of the financial services so that more people can be integrated into the main financial streamline. Moreover, government banks may extend their services in interior parts of the state so that more people are connected with financial institutions and their bank accounts can be opened aiming to enhance their self-efficacy and social status.

5. Limitations and Future Scope

The present study examined the linkage between financial inclusion schemes and income level of Haryana respondents. For this, the present study used four dimensions of financial inclusion such as improvement in social status; better self-efficacy; increased financial status; and improved self-respect and self-confidence. In addition to these dimensions of financial inclusion, future studies may include other relevant dimensions of financial inclusion that would represent more details of financial inclusion. The present study examined the linkage of financial inclusion with only one demographic variable i.e. income; however, future studies need to examine other demographic variables such as gender, occupation and education etc. future studies may also select a specific financial inclusion scheme for examining the ground level impact of that scheme on low-income people. In this study, only one state Haryana was selected. Therefore, future studies may select other states of the country and findings of potential studies may be compared with the findings of present study so that state level comparisons on financial inclusion may be drawn.

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