

## Analyzing Behavioral Biases in Finance Operations of Self-Help Groups

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### Abstract:

Women's role in society has evolved from a matter of gender restrictions to one of equal participation in the decision-making process and their overall well-being. Women's empowerment has thus become a key factor in the development of the community in both social and economic terms. Studies have demonstrated that women's self-help group participation has had a significant impact on their lives and empowered them from the ground up. However, despite demonstrating their abilities, they still face discrimination in the economic field compared to their male counterparts. This study utilized basic statistical tools to analyze the behavioral pattern of behavior finance in the procurement and utilization of finance functions of women's Self-Help Groups in Assam. The results of the study, which was conducted on 100 respondents of Self-Help Groups on South Block, Golaghat District in Assam, demonstrate a positive effect of self-serving and mental accounting biases on the functioning of financial functions in Self-Help Groups.

**Keywords:** Finance functions, Self-help groups, procurement functions, Utilization functions

### 1. INTRODUCTION

Recent developments around the world demand desirable changes for women in society. Various policies and programs were implemented to foster equal participation at national and international levels to collaborate with men to work together. It is worth mentioning that women have been funded under various programs for entrepreneurial activities and mandated to fulfill their targets through them as well<sup>1</sup>. Women play a crucial role in the promotion of sustainable living in developing nations, and their entrepreneurial activities contribute towards socio-economic development (Sahu et al., 2021). But sustainable livelihoods have been a dream for developing nations (Kumar et al., 2023). According to the Ministry of Women and Child Development (WCD) in 2023<sup>2</sup>, the strategic alliance of various nations through G20 focuses on transforming difficult pathways into opportunities through greater financial inclusion of women in entrepreneurship. The term empower in the Ministry of WCD indicates the empowerment and progress of women's economic representation towards a win-win state and promoting leadership at the grassroots level. One such strategy to empower women through a multidimensional approach was the invention of self-help groups.

Self-help groups are voluntary associations of 15-20 women who come from almost similar socio-economic backgrounds. They form groups to improve their social and economic status to overcome their common problems by operating small amounts of savings as funds and in return providing loans to their members<sup>3</sup>. It has been seen that women around the world play numerous active roles and mostly work harder than men (Kovaleva et al., 2023). Microfinance with special reference to self-help groups is a shared economy based on P2P (peer-to-peer) activities of direct community interaction with a 'decentralized' decision-making system providing mutual support to marginalized sections of the society (Rai et

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<sup>1</sup> Source: <https://www.livemint.com/opinion/columns/nari-shakti-offers-g20-nations-a-women-s-empowerment-model-11677522506110.html> accessed on March 30, 2023 at 08.20 p.m.

<sup>2</sup>Source: <https://pib.gov.in/PressReleasePage.aspx?PRID=1897882#:~:text=G20%20EMPOWER%202023%20will%20focus,across%20the%20three%20focus%20areas> accessed on March 30, 2023 at 2.30 p.m.

<sup>3</sup> Source: <https://www.jsscacs.edu.in/sites/default/files/Files/PG%20com%20lv%20CTCB.pdf> accessed on 25/03/2023 at 8.51 A.M

al., 2021. Nagamani, 2022). Started by the breakdown of Mysore Resettlement and Area Development Agencies (MYRADA) in 1985, SHGs were undertaken as a project by NABARD to mitigate poverty by introducing Bank Linkage Programme in the year 1992 (Parthasarathy, 2015).

Kondal's (2014) study on self-help groups in Andhra Pradesh found an increase in income and investment in various activities after joining the groups. Similar were the findings of (Sharma & Varma, 2008) where they found a positive impact on income, savings, and investment through various entrepreneurial activities undertaken by women. The groups helped to improve the literacy level, and social recognition, and improved decision-making in every aspect. Brody et al. (2017) analyzed that the positive effects of SHG are associated with the way of handling money, having financial freedom, respect from household members, widening social networks, and much more. Having various outcomes that enable them to transform women their desired actions into outcomes, SHGs are proven to be effective among female participants for better livelihood. This is in line with the (Vijayanthi, 2002) study where the groups have been found to strengthen the women to be self-reliant, raising the habit of savings and training them to find solutions to their problems. Considering the power of decision-making in the family, political participation, and personal freedom through economic aspects as indexes, (Garai et al., 2012) it was evident that the participation of women in SHGs was higher and significant differences can be seen in them as compared to non SHG members. Similar findings were analyzed by Archana & Singh (2002) where they evaluated the economic benefits that members derived after joining groups were visible by thrift of savings, taking credit through banks, and increase in the economic well-being of family earnings. Salvi's (2019) study found that peer pressure and collective decision-making help women to use the procured funds appropriately later in repayment within the time frame. While women showcased their entrepreneurial activities there are fewer signs of improved economic status to the level of expectations which states the fact that they are lacking to bring their skills into reality. Khan et al. (2020) quasi-experimental analysis of ten districts of Kashmir Valley found favorable signs of the holistic effect of empowerment of long-term membership duration when compared to new members of the group. However serious loopholes are still causing hindrances in women's participation in self-employment such as lack of marketing knowledge, pricing issues, and unawareness of adopting strategies and technological knowledge which should be addressed by the policymakers. Were & Kimaru-Muchai's (2021) study on 108 SHGs in Kibra of Kenya revealed the leadership provided through the formation of groups changed their perception towards decision-making and improved their lives by building confidence. It showed positive signs of diversifying the incomes and utilization of group savings for expanding their credits to other needy members of the group and suggested greater emphasis on training and educating women to put them forward in economic aspects at early ages. Similar were the findings of (Bariya et al. 2022) when women members of SHG were compared with non-SHG members and found that women of SHGs utilized their time, energy, and skills in a better way to enhance their income and to support their families in a holistic approach which were absent before joining the groups.

Self-help groups were formed with the task of changing the behavioral patterns of women in rural areas for the development of empowerment. Behavioral changes of women involved in SHGs were measured within the household to improve their well-being (Swain & Wallentin, 2009), health-related (Narasimha et al., 2016), self-selection-based schemes provided by the government (Hussain et al., 2014), psychological dimensions (Zimmerman, 1995), savings (Swain<sup>81</sup>, 2007), decision-making (Pandey & Roberts, 2012), and much more. According to Stang & Mittelmark (2010), the actions undertaken by women that directly reflect the outcomes indicated the individual as well as collective behavioral patterns of self-help groups. Self-help groups often act as "microcosms" where the interactions of women's behavior along with their biases play a significant role not only in the financial decisions of the groups but also having a wider socio-economic impact on the environment (Kivlighan et al., 2021). To understand the finance pattern of women, a new field of finance has sprung up. Behavioral economics, also known as behavioral finance, was first developed by Daniel Kahneman and Amos Tversky in the 1970-80s<sup>4</sup>. It refers to the irrational financial decisions that take place in real life and attempts to understand the consequences that affect the decisions. They differ from the traditional theories which explain humans as rational decision-makers. Studies showed that the behavior of women can be affected by a wide range of psychological factors including cognitive biases that shape their financial relationships and decisions (Kartini & Nahda,

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<sup>4</sup> Source: <https://www.kaplanfinancial.com/resources/career-advancement/behavioral-finance#:~:text=Behavioral%20finance%20originated%20from%20the,Shiller%20in%20the%201970s-1980s>. accessed on 25/03/2023 at 3.40 P.M

2021. Ahmad, 2020). Behavioral finance aims to throw light on the pattern of human psychology that works on financial decisions. The various theories considered for the present study are explained below:

1. **Self-serving Bias:** It refers to the tendency of a person to assign positive outcomes to themselves and negative outcomes of life to outsiders (Miller & Ross, 1975. Ramiah et al., 2014, 2015). It happens due to culture, age, beliefs, health, and much more (Chowk et al., 2016). Researchers around the world argued that self-serving bias leads managers to be overconfident in making bad decisions in corporate policies (Li, 2010), causes a change in the level of confidence among the investors in the securities market (Daniel et al., 1998), biases in decision making (Babcock & Loewenstein, 1997), higher preference for tax and property for financial planners (Chowk et al., 2016), positive impact on financial literacy. The bias is especially common among women in certain areas. According to Abele & Brackmuller (2013), women tend to put more emphasis on internal factors (skills and effort) rather than external factors (failures due to level of difficulty or lack of support). Being reinforced by social norms and expectations, they tend to put a lot of emphasis on communal attributes that in turn reinforce the positive self-image of women. Considering the bias as a cognitive default due to the medial prefrontal cortex, it requires cognitive effort to overrule influenced by the degree of “mental laziness” (Krusemark et al., 2008). As an adaptive trait, the bias emerges when individuals look at themselves as better than the average person (Taylor & Brown, 1988). Self-serving bias can sometimes result in negative outcomes due to overconfidence in excessive risk-taking capacity and poor judgment skills (Acker & Duck, 2008). However, even after that, traders are expected to be substantially richer than those possessing lesser confidence (Gervais & Odean, 2001). Rudman & Goodwin (2004) suggested that women leaders tend to put their success in traditionally male-dominated roles to internal factors while attributing their failures to external factors of discrimination or preconceived notions. In contrast, a body of research, in context to academic and professional settings argued that women understate their achievements attributing their successes to external factors while internalizing failures (Crocker et al., 1998). The intricate dynamics between societal expectations, gender roles, and individual self-perception served as a crucial factor to show in some contexts where women attribute success to internal factors and failures to external ones, while, in other settings, a self-effacing bias prevails.

2. **Mental accounting Bias:** The bias leads to a tendency to assign the accounts according to one’s spending and separate it mentally with the intention of usage in terms of value. It affects the decision making thus bringing an imaginary financial situation that often fails to look at the bigger picture, hence lends up either by overspending or more efforts to save up than usual<sup>5</sup>. Studies have found that women exhibit distinct patterns of mental accounting bias in financial decision-making processes, often influenced by sociocultural factors and individual experiences (Ferreira-Schenk & Dickason-Koekemoer, 2023). Women tend to focus on earmarking money for specific purposes such as expenses related to family, savings for children’s education, or healthcare. It lets them segregate their mental accounts for financial goals, thereby impacting their decision-making regarding resource allocation (Bucher-Koenen & Kusardi, 2011). According to Thaler (1999), the bias receives attention from three components: the first one is about how results are seen and experienced, while the second one is about how choices are made and evaluated, labeling them into real accounts and the third one includes the evaluation of accounts, described as ‘choice bracketing’ (Read et al., 1998). Under laboratory settings, mental accounting was more likely to demonstrate a strong correlation with the adequacy of economic behavior as individuals tend to purchase cash and receive gifts (Ahmadi & Matoufi, 2020). In the field of financial decision-making, the bias analyses the condition of the individuals including their financial decisions made in the context of various financial occurrences and conditions (Mohammadi Nafchi, 2020). Another observation was made by Barber & Odean (2001) that women were more likely to separate their financial decisions based on a conservative approach under emotional circumstances of preserving capital rather than taking risks for higher returns. Cultural and societal roles also play a vital role in shaping the mental accounts of women through compartmentalization of funds for specific needs, impacting their investment strategies and risk tolerance (Lown et al., 2015). Additionally, some studies argued that women were less inclined towards mental accounting as the traits they possess do not match with the bias and hence they fit into the definition of rationality (Zijia Li, 2021)

3. **Regret aversion Bias:** The cognitive bias lets a person avoid the alternative regret of a decision that was not been taken. The fear of a decision being wrong and regretful lets a person avoid the emotional pain that may be caused in decision-making<sup>6</sup>. Experiencing regret from past mistakes and the regret of experiencing the consequence of wrong decisions are

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<sup>5</sup> Source: <https://thedecisionlab.com/biases/mental-accounting> accessed on 25/03/2023 at 2.20 P.M

<sup>6</sup> Source: <https://www.managementstudyguide.com/regret-aversion-bias.htm> accessed on 21/03/2023 at 7.56 P.M

the two components of it (Bailey & Kinerson, 2005). Studies found that experienced regret does not impact the decision-making of investment (Sukamulja et al., 2019). The bias also plays a significant role in shaping women's attitudes towards risk-taking. Women's tendency to avoid risks due to the fear of regret often leads them to more conservative choices, influencing career advancements and financial opportunities (Zeelenberg & Pieters, 2007). Some studies reported that investors are not able to bear losses as it confirms their initial judgment being wrong (Savage, 1951). It later on boosts them to acknowledge their mistakes and avoid them for future regrets (Thaler, 1985). Yang & Wang (2018) described regret theory that is an alternative behavior theory comprehending regret aversion. The theory is based on individuals who experience regret and anticipation after encountering a situation of uncertainty. The expansion to the theory of prospect is a 'primary emotion' in making decisions that enable the decision makers to forfend their decision-making (Kahneman & Tversky, 1979; Loomes & Sugden, 1982; Mellers, 2000' Larrick & Boles, 1995).

## 2. RELEVANCE OF THE RESEARCH

Throughout different eras, women have been subjected to various discrimination, unequal footing in the economy, and gender limitations. The power to control their lives, wishful decision-making, and autonomy lay in the hands of others. When said, "Yatra Naryastu Pujyante Ramante Tatra Devata<sup>7</sup>" which means the divine blooms when women are honored irrespective of the fields, it defines women to progress socially, economically, politically, and in other backgrounds too. Self-help groups have been an ideal model for women to progress holistically from the grassroots level through various government initiatives. Research around the world found SHGs to be an effective implementing strategy to alleviate poverty from its grassroots level and empower women in rural areas. Various initiatives such as Sustainable Development Goals and G20 EMPOWER have been adopted to achieve equity in accessing labor force participation. The present study contributes to the existing literature on self-help groups with context to women empowerment by offering valuable insights into how cognitive and emotional factors influence the financial decision-making of the groups. The behavioral settings delving into the realm of microfinance and P2P (peer-to-peer) are significant in the context of global financial efforts (Kandpal, 2020). Understanding it can create better financial products and services, which aligns with the goals of the United Nations to make financial services accessible, affordable, and reliable for all (United Nations, 2015). It becomes evident to study the behavioral dimensions of the various targeted economic functions of self-help groups to highlight the redefining view of women given in various works of literature.

## 3. OBJECTIVES AND HYPOTHESIS OF THE STUDY

The behavior of women has been a keen interest to researchers to understand the developmental process of empowering them. Very few pieces of literature cover the aspects of behavioral finance and the pattern of irrational expectations towards the performance of self-help groups. The present study aims to serve the following purposes:

1. To analyze the demographic characteristics of women involved in the area profile of self-help groups.
2. To analyze the impact of behavioral biases leading towards procuring the finance of SHGs and utilizing the finance in women's self-help groups.

Hypothesis:

Ho: Self-serving, mental accounting and regret aversion bias have no impact on the decisions taken for finance procurement functions of women self-help groups

Ho<sub>1</sub>: Self-serving, mental accounting and regret aversion bias have an impact on the decisions taken for finance utilization functions of women self-help groups.

## 4. RESEARCH METHODOLOGY

The present study considered the approach both descriptive and analytical, focusing on understanding the views and opinions of women participants from different self-help groups (SHGs) within the South block of Golaghat district, Assam. Data for the study was collected using structured questionnaires. In this case, the structured questionnaires were

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<sup>7</sup> Source: <https://www.sentinelassam.com/editorial/women-holding-up-half-the-sky-642599> accessed on 30/03/2023 at 1.22 P.M

designed to capture the perspectives and feedback of each woman regarding the finance operations of individual self-help groups. The statistics used in the study included correlation analysis, which is a statistical method used to evaluate the strength and direction of the relationship between two quantitative variables. This analysis was conducted using software such as MS Excel and SPSS (Statistical Package for the Social Sciences). The study involved 100 women respondents, each representing different self-help groups. The sample size was determined based on the specific context of the study and aimed to ensure an adequate representation of the diverse perspectives and opinions within the women SHGs in the given area.

## 5. DATA ANALYSIS

Table 1: Demographic Profile of respondents

Variables	Range considered	Categories of range	No. of respondents
Age	25 to 55 and above	25 -34	45
		35-44	29
		45-54	23
		Above 55	03
Qualification	Illiterate to bachelor's degree	Never Studied	17
		Below HSLC	32
		HSLC	27
		H. S	13
		Degree	11
Occupation		Agriculture	35
		Business	7
		Daily wage Workers	10
		Unemployed	13
		Poultry	18
		Handloom weavers	17

Source: Field Survey

Table 1 presents the overview of the demographic profile of women taken into consideration concerning self-help groups. It shows that the majority (45%) of women involved in participation in the groups lie between the age group of 25 to 34, following 29% between the age of 35 to 44 years, 23% in between the age group of 45 to 54 years and only 3% above the age of 55 years. It is evident from the table that young-aged women are most willing to join the groups whereas, as they grow older, they are burdened with various household and other responsibilities which makes them reluctant to involve in the groups or leave in between.

Education is the most crucial factor for women in self-help groups. It helps them to avail various employment-oriented opportunities, apply knowledge for better decision-making, usage of technology and uplift themselves in progressive lives. The above data shows 32% of women possess primary and middle-level education followed by 17% of them who have never studied before, 27% have Matriculation (HSLC), 13% of higher secondary, and 11% have their bachelor's degree. It represents those women who haven't studied before and have faced challenges in understanding the various pieces of training given in the maintenance of record keeping, signing their initials.

The occupation serves as a source of engaging in a stable income for the women of self-help groups to enhance their livelihood. As regards occupation, only 35% of respondents expressed their response to agriculture as compared to 18% respondents of having poultry business, 17% engaged as handloom weavers, 13% of them are unemployed, 10% of them as daily wage laborers, and only 7% of women are engaged in other business.

Table 2: Hypothesis testing of Finance Procurement and Utilization functions of Self-help groups.

	Kolmogorov-Smirnov <sup>a</sup>		
	Statistic	df	Sig.
Internal lending within the group	.523	100	.000
Allotment under any schemes	.457	100	.000
Receive any subsidy from government	.381	100	.000
Receive any supplies in the form of kind	.453	100	.000
Receive any revolving fund	.402	100	.000
Procurement of raw materials	.428	100	.000
Enhance income and earnings	.530	100	.000
cash available for internal lending	.499	100	.000
Timey available of cash for running of business	.472	100	.000
Reduce cash lending cycles in your group	.371	100	.000

a. Lilliefors Significance Correction.

Source: Output SPSS

Table 2 shows the hypothesis testing using the Kolmogorov-Smirnov test. Here, we can see the p-value of .000 which reports having a p-value < 0.05. We, therefore, have considerable evidence to reject the null hypothesis that the variable follows a normal distribution.

Table 3: Hypothesis testing of behavioral biases of women members of self-help groups.

	Kolmogorov-Smirnov <sup>a</sup>		
	Statistic	df	Sig.
Knowledge of group members	0.535	100	0
Rules adhered to banks	0.345	100	0
Providing greater opportunities in future to avail loans	0.486	100	0
Boosts the morale of members to use money for their business	0.457	100	0
Comes down in value	0.39	100	0
Comes up in value	0.513	100	0
Regret in group's financing decision	0.52	100	0
Asset spending for SHG	0.35	100	0
Operational activities for SHG	0.345	100	0

a. Lilliefors Significance Correction.

Source: Output SPSS

Table 3 shows the hypothesis testing using the Kolmogorov-Smirnov test. Here, we can see the p-value of .000 which reports to have p-value < 0.05. We, therefore, have considerable evidence to reject the null hypothesis that the variable follows a normal distribution.

Table 4: Correlation of Self-serving Bias with the finance procurement functions performed by SHG.

		Internal lending within the group	Allotment under any schemes	Receive any subsidy from government	Receive any supplies in the form of kind	Receive any revolving fund
Spearman's rho	Knowledge of group members	.005	.153	-.027	-.062	-.079
	Rules adhered to banks	-.054	-.055	.301**	.032	.098
	Providing greater opportunities in future to avail loans	.036	.295**	.009	-.116	.001
	Boosts the morale of members to use money for their business	-.086	.087	.167	.028	.081

Source: Output SPSS

\*\*Correlation is significant at the 0.01 level (2-tailed) \*Correlation is significant at the 0.05 level (2-tailed)

The Spearman's correlation test was performed to know the non-parametric relationship of self-serving bias among the five components of finance procurement functions of women members involved in self-help groups named as internal lending within the members of the group, registered under any of government-initiated schemes, received any subsidy from the government, received any kind of other supplies from the government (in non-cash form) and availing of revolving fund from the group. Self-serving bias was measured on the reasons of the contribution of having a good record of the groups for which the members can avail loans to which they responded either due to good knowledge among the members or rules adhered to by financial institutions. The parameters considered are depicted above in table 4 and it signifies that the rules adhered to by various financial institutions directly correlate at 0.01% level to the subsidy received from the government ( $r = .301$ ). The women members take the credit of repayment of loans within the specified time frame given by the banks which later allows them to take the decision of availing benefits of subsidies provided by the government. Further, the bias was also measured to know whether the results of the above reasons provided them better opportunities to avail future loans or boosted the morale of the women for doing business to which the results signify that those women allotted under various schemes benefited ( $r = .295$ ) by having greater opportunities to get better and higher loans in future.

Table 5: Correlation of Regret Aversion Bias with the finance procurement functions performed by SHG

	Internal lending within the group	Allotment under any schemes	Receive any subsidy from government	Receive any supplies in the form of kind	Receive any revolving fund

Spearman's rho	Comes down in value	-0.118	0.099	-0.069	-0.147	0.047
	Comes up in value	-0.105	0.156	0.088	-0.019	0.135
	Regret in group's financing decision	0.143	-0.1	0.028	-0.042	0.058

Source: Output SPSS

\*\*Correlation is significant at the 0.01 level (2-tailed) \*Correlation is significant at the 0.05 level (2-tailed)

Regarding the measurement of regret aversion of women respondents, questions were asked on how well they decide whether to sell or hold the items for a longer duration or to purchase more if the cost price comes up or down in terms of value to which the table 5 signifies having no relation with the variables of procurement finance functions of self-help groups. Further, the bias was measured on whether they regret their financing-related decision which shows similar findings of having no relation among the variables of procurement finance functions of self-help groups. It can be inferred that women members do not regret any of the decision that was made to procure finance after joining the self-help groups.

Table 6: Correlation of Mental Accounting Bias with the finance procurement functions performed by SHG.

		Internal lending within the group	Allotment under any schemes	Receive any subsidy from government	Receive any supplies in the form of kind	Receive any revolving fund
Spearman's rho	Asset spending for SHG	-0.015	.133	-.156	-.109	-.114
	Operational activities for SHG	-.007	.146	-.179	-.121	-.098

Source: Output SPSS

\*\*Correlation is significant at the 0.01 level (2-tailed) \*Correlation is significant at the 0.05 level (2-tailed)

A similar test was also performed in table 6 to know the relationship of various variables of finance procurement functions named as internal lending within the members of the group, registered under any of government-initiated schemes, received any subsidy from the government, received any kind of other supplies from the government (in non-cash form) and availing of revolving fund from the group with the mental accounting bias of the women members. The bias was measured to know whether the members mentally sort their funds for the asset spending of the group and the operational activities done in the group. The above table signifies having no relationship between any finance procurement variables among the operations of the group which signifies having no bias among the members of various self-help groups.

Table 7: Correlation of Self-Serving Bias with the finance utilization functions performed by SHG.

		Procurement of raw materials	Enhance income and earnings	cash available for internal lending	Timey available of cash for running of business	Reduce cash lending cycles in your group
Spearman's rho	Knowledge of group members	0.129	0.025	-0.138	-0.166	-0.187



Rules adhered to banks	-0.163	0.007	0.114	0.058	-0.023
Providing greater opportunities in future to avail loans	0.049	-0.008	0.014	-0.002	0.038
Boosts the morale of members to use money for their business	-0.148	-0.053	0.008	0.133	-0.085

Source: Output SPSS

\*\*Correlation is significant at the 0.01 level (2-tailed) \*Correlation is significant at the 0.05 level (2-tailed)

Pearson’s test was performed to measure the self-serving bias among the women participants of self-help groups concerning the variables of finance utilization functions performed in self-help groups. The variables consisting of procurement of raw materials, enhancement of income and earnings, cash available for internal lending, timely availability of cash for the business, and reduce cash lending cycles of group members were taken into consideration. The data given above in table 7 deciphers that the group members do not consider any positive or negative outcomes to be the factors for utilization of finance procured from the membership of self-help groups.

Table 8: Correlation of Mental Accounting Bias with the finance utilization functions performed by SHG.

		Procurement of raw materials	Enhance income and earnings	cash available for internal lending	Timey available of cash for running of business	Reduce cash lending cycles in your group
Spearman's rho	Asset spending for SHG	.049	-.080	.190	.024	.206*
	Operational activities for SHG	.078	-.073	.199*	.036	.184

Source: Output SPSS

\*\*Correlation is significant at the 0.01 level (2-tailed) \*Correlation is significant at the 0.05 level (2-tailed)

Pearson’s test for analyzing the relationship of mental accounting bias with the variables of finance utilization functions was found (Table 8) to have a positive relationship of (r =.206) decision for spending the assets (r=.206) and operational activities (r= .199) of the group to increase in reducing the lending cycles among the members of the group and cash available for internal lending, respectively. It signifies the fact that the amount of assets spending done in the group helps the members to increase the periodic reduction of lending cycles within the members of the group. Further, the better maintenance of operational activities lets women have the availability of cash for internal lending for the members of the group.

Table 9: Correlation of Regret Aversion Bias with the finance utilization functions performed by SHG.

		Procurement of raw materials	Enhance income and earnings	cash available for internal lending	Timey available of cash for running of business	Reduce cash lending cycles in your group
Spearman's rho	Comes down in value	.100	-.174	.143	.103	.164
	Comes up in value	-.047	-.021	.118	-.005	.032
	Regret in group's financing decision	.045	-.168	.026	.148	-.077

Source: Output SPSS

\*\*Correlation is significant at the 0.01 level (2-tailed) \*Correlation is significant at the 0.05 level (2-tailed)

Table 9 indicates the presence of regret aversion bias in the decision-making of the finance utilization functions of the group members. The respondents were asked about their decisions regarding the business changes if the price of items to be sold comes up or down in value. It was found that their decisions remain independent of the variables stated in Table 8 regarding the finance utilization functions obtained in the group. Similar was the response in respect of regret in the group's financing decision to which there was no relation of regret with the decision-making of variables of utilization functions.

## 6. CONCLUSION

The present study seeks to unveil and analyze the influence of behavioral biases on the decision-making processes of women participants within self-help groups, specifically highlighting the impact of self-serving bias, mental accounting, and regret aversion bias on finance procurement and utilization functions. The primary focus on self-help groups (SHGs) was implemented to understand how women, operating within these groups, navigate their financial decision-making processes, uncovering the behavioral biases affecting their financial procurement and utilization actions. The study revealed a significant influence of self-serving bias on finance procurement activities and mental accounting bias on finance utilization among women in self-help groups. The significant changes stand in line with the previous findings of investors decision-making, managerial decision-making, financial decision-making (Ullah, 2015; Cristofaro & Giardino, 2020; Libby & Rennekamp, 2016). It noted the absence of a clear pattern of regret aversion bias in the decision-making process related to finance procurement and utilization in the context of similar findings (Iram et al., 2021; Sokol-Hessner et al., 2009). Previous studies have widely explained financial decision-making biases within various contexts of financial literacy with the decision-making of investment (Iram et al., 2021), financial behavior on economic decisions (Molishti & Ndoka, 2022), investors' mistakes to biases mental biases (Ceren & Akkaya, 2013) and so on. In comparison to prior studies, this research provides a specific insight into the financial decision-making processes within self-help groups, highlighting the distinctive influence of self-serving bias and mental accounting bias. The absence of a prominent regret aversion bias in financial decisions among women in SHGs distinguishes this study from others exploring decision-making biases. The generalizability of the findings might be limited due to the specific regional context of the study along with the potentiality of expanding the scope within the wide range of behavioral finance to obtain a holistic view of decision-making in self-help groups.

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