Moderating Role of Personality in Relationship to Financial Attitude, Financial Behaviour, Financial Knowledge and Financial Capability

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ABSTRACT

Advancements in financial system and technology, enlarged individual responsibility for financial decisions, and rapid information expansion, have fundamentally transformed women's need to be functionally literate and financially capable, especially after the COVID-19 pandemic. The personality also has long term implications on financial well-being. The aim of the paper is to study the dominating role of financial attitude, financial awareness & skills, and financial behaviour on financial competence and the moderating role of personality on financial knowledge, financial behaviour, financial attitude, and financial capability. Multi stage stratified random sampling has been used to collect data from 530 urban working women in both the Public and Private sectors, self-employed professionals, and entrepreneurs. Smart-PLS is used by applying Structure Equation Modelling (SEM) to study the moderating role of personality on financial attitude, behaviour, knowledge, and capability. Further the Chi-square test and Tukey test and Kruskal Wallis Test are used to test the hypothesis. The study found that Financial Knowledge of working women with gold personalities influences their financial capability (Beta, 0.578) the most, While, Financial Behaviour is the primary influencer having green (Beta, 0.396) & blue (Beta, 0.638) personalities. Working women having Green Personality are found to be superior with respect to Financial Behaviour, Financial Capability and Financial Knowledge. It is also observed that working women having blue personality characteristics, have comparatively better financial attitude.

1. INTRODUCTION

The COVID-19 epidemic has altered the global landscape, wreaking havoc on human and economic conditions that strengthened the need of becoming financially knowledgeable, stable and competent [1]. Financial capability is a decisive step toward financial stability. A financially capable person employs money management tactics and savings strategies on a regular basis to avoid budgetary constraints or financial problems and attain higher financial stability [2]. To make effective financial decisions and attain financial capacity, a blend of awareness, knowledge, skill, attitude, and conduct is required [3]. Financial capability is also affected by individual's experience, condition and the personality [4]. The personality has strong relationship with financial decision making [5]. Greater level of financial capable behaviour is not just because of high level of financial knowledge or high degree of attitude, but also significantly associated with personality, which includes positive and impulsive behaviour to face challenges and to take accurate financial decisions [6]. The personality has long-term implications on financial well-being.

Women make up 41% of the global workforce. Even after playing the significant role in the society and performing dual responsibilities as home-maker and working women, a global gender wage gap is of 23% [7]. Women are underrepresented in the majority of economic activity. They are still reliant on their male counterpart or the father. Women have lower level of financial literacy and financial capability than do men have in most countries or cultural differences [8]. By increasing their financial engagement could result in annual economic gains of trillions of dollars.

In this research paper, the aim is to compare the level of financial knowledge, financial attitude, financial behaviour and financial capability among working women belonging to different personality category and the moderating role of personality is also examined on financial knowledge, attitude, behaviour and financial capability.

2. REVIEW OF LITERATURE

2.1 Financial capability

Financial capability is defined as, "the ability to apply financial information and abilities to achieve financial well-being while maintaining a positive attitude. Financial capability is divided into four components: money management, staying informed, selection of the product and future planning" [9]. Financial capability can be revealed by a

specific degree of financial knowledge and skills and execution of advantageous financial behaviour. Therefore, it can be said that financial knowledge & skills, financial attitude and financial behaviour are firmly connected with financial capacity to attain financial strength [10]. Financial capability need not only financial knowledge but also financial attitude and financial behaviour [11].

2.2 Financial knowledge & skills

Financial knowledge is an analytical comprehension of financial concepts, products and services that is essential to apply the information in day-to-day life to become financially capable [12]. It refers to the process through which people improve their financial abilities and confidence by becoming more aware of financial hazards and possibilities, making informed decisions, knowing where to get assistance, and taking effectual steps to boost their financial competence [13].
H1: Financial Knowledge affects Financial Capability.

2.3 Financial behaviour

Financial behaviour is the positive behaviour that enhances the financial capability of the individual [14]. It comprises of planning for expenditures, quick payment of bills, making of budgets, regular savings [15].
H2: Financial Behaviour affects Financial Capability.

2.4 Financial attitude

Financial attitude can be characterized as the inclination of the person in relation to financial matters. It is the skill to make plans for future and track financial transactions. It is the result of financial behaviour of a person to take financial decision and deep-rooted through his economic and non-economic beliefs [16]. Without strong financial attitudes, gaining financial profit for the future would be difficult, as these two characteristics are linked to achieving short and long-term life goals [17]. Routine actions can shape financial attitudes.
H3: Financial Attitude affects Financial Capability.

2.5 Personality

Financially capable behaviour is not only about the financial knowledge and attitude one has attained but also strongly influenced by personality of the person [6]. Personality traits are a blend of emotive, cognitive and motivational characteristics that influence the individuals' response to the environment, and the decision making under certain circumstances [18]. The person can be categorized as either 'logical' or 'emotional.' Emotional investors make investment decisions based on their emotional motivation, whereas rational investors make judgments based on the data they have [19]. In this research paper, true color personality test is used to study the role of personality of financial capability. The test categorizes women into one of four personality types: blue, green, orange, or gold [20, 21]. Green personality women have a stronger desire to learn new things from existing material, and they are more likely to have an analytical mind and good research skills. They make decisions based on data and statistics, and they work hard to encourage intelligent considerations. Women of this category have a conscientious personality [22]. 'Conscientiousness' refers to an individual's cognitive and analytical abilities when making decisions [19].

Blue Colored personality women are more sensitive, unselfish, compassionate, and make decisions based on emotions. These women have a Neuroticism personality type [23]. 'Neuroticism' refers to a person's emotional stability when making an investing decision [19]. Gold personalities are dependable, decisive, organized, and have a strong sense of safety and security. These women have Agreeable personality [24]. The attribute of 'Agreeability' describes how people react to new information. Orange personality women with orange personalities are risk-takers, fun-lovers, carefree, and brave. Individuals with orange personalities are known for their business acumen. These women are of Extroversion personality type [25]. Individuals' behaviour toward others is referred to as 'extraversion.' Extroverts are assertive and prefer to move around with others. High levels of financial capability indicate greater level of control over finances and ability to use the knowledge, plan and act on them, which can lead to better mental well-being [25].

3. OBJECTIVE OF THE STUDY

In this study, the researchers have attempted to

- Compare level of financial knowledge, financial attitude, financial behaviour and financial capability among women belonging to different personality category
- Examine the role of personality on impact of financial knowledge, attitude, behaviour and financial capability of working women.

4. RESEARCH METHODOLOGY

4.1 Variables studied

Financial Literacy	
Financial Knowledge [26-30]	• <u>Numeracy Skills</u> • Addition, Subtraction, Multiplication and Division • Ease of money transaction • Calculation of interest • <u>Conceptual Skills</u> • Time value of money • Inflation • Simple and compound interest • Risk and return • Diversification • <u>Life Skills</u> • Distinguish between need and want • <u>Financial Skills</u> • Bank A/C ownership • Payment through modern techniques • Access of Bank loans • Purchase of financial products easily
Financial Behaviour [31-33]	• Affordability • Household Budgeting • Setting Long Term Goals and striving to achieve them • Ability towards meeting monthly expenses • Evaluation of financial products before buying • Gathering financial information from authentic sources
Financial Attitude [34, 35]	• Towards Spending Money • Towards Saving Money • Towards Planning Money

Financial Capability	
Managing Money [36-39]	<u>Making End Meets</u> • Keep financial commitments without difficulty • Progressive attitude toward saving and investment • Never ran out for money • Had not been any financial difficulty in the last five years, if had but managed A. <u>Keeping Track</u> • Frequent checking of the saving & investment amount • Check their receipts against bank statements • Know saving a/c balances Budget to cover heavy expenditures
Planning Ahead [40, 41]	• Had sufficient provisions for any emergency of mis-happening • Could make end meets for 1 year if income reduces • Ownership of insurance policies • Ownership of retirement provisions and plans • Saving for rainy days with a positive mindset
Choose Products [42, 43]	• Sought advises from professional advisors • Do not just rely on product information, also seek experience • Compare products more than one provider • Compare features and prices of the product, not just brand • Carefully read and understand the terms and conditions.
Staying Informed [44, 45]	• Monitor financial indicators • Check them frequently • Feel to keep up to date in financial matters

4.2 Sample

This particular research work is solely based on primary data. Multi stage stratified random sampling has been used to collect data from urban working women in both the Public and Private sectors, self-employed professionals, and entrepreneurs. 600 urban working women from Jaipur were approached with a standard questionnaire. 535 filled questionnaires were returned in which 530 were properly filled. Thus, the sample size of this study is 530. Thus, response rate was 88.33% approximately.

4.3 Measures

Partial Least Square (PLS) analysis is used as an analytical tool in this study. PLS is a powerful analytical tool since it does not require many assumptions and can explain the relationship between latent variables [46].

4.4 Theoretical framework

The theoretical framework (Figure 1) shows the way

through which the study is being organized to achieve the research objectives. It explains the relationship between financial behaviour, financial knowledge& skills, financial attitude and financial capability along with the moderating role of personality.
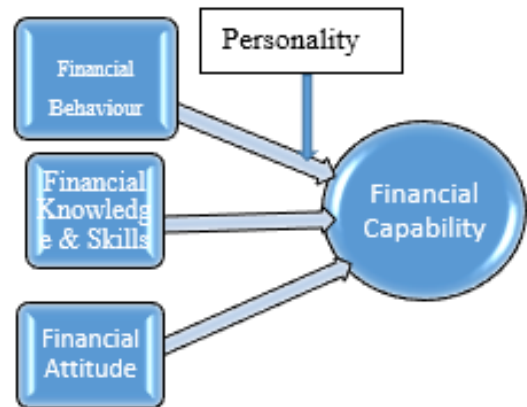

Figure 1. Author's compilation

5. RESULTS

The measurement model and the structural model are both evaluated using PLS-SEM. *Convergent validity, discriminant validity, and construct reliability* are used to evaluate the measurement models [47].

5.1 Assessment of measurement model

Measurement models are used in assessing validity & reliability of constructs [48]. Latent variable's internal consistency is usually examined by using "Cronbach's Alpha" and "Composite Reliability" [47]. 0.7 or higher Cronbach alpha values signify acceptable internal consistency.

Table 1. Validity and reliability of constructs

	Cronbach's Alpha	rho_A	CR	AVE
Financial Knowledge	0.952	0.956	0.958	0.657
Financial Behaviour	0.957	0.957	0.965	0.822
Financial Attitude	0.755	0.807	0.842	0.578
Financial Capability	0.973	0.974	0.975	0.651

The Table 1 shows that the The value of Cronbach's Alpha for each construct is observed greater than 0.7; therefore, these constructs meet the criterion of internal consistency. Apart from it, obtained values of rho_A and Composite Reliability for each latent variable is more than 0.7 and respectively values of AVE are more than 0.5 which fulfills criterion of convergent validity [49].

Table 2. Fornell-larcker criterion

	Financial Attitude	Financial Behaviour	Financial Capability	Financial Knowledge
Financial Attitude	**0.677**			
Financial Behaviour	0.677	**0.907**		
Financial Capability	0.733	0.851	**0.779**	
Financial Knowledge	0.637	0.886	0.833	**0.811**

Table 3. Heterotrait - monotrait ratio (HTMT)

	Original Sample (O)	Sample Mean (M)	2.5%	97.5%
Financial Knowledge -> Financial Behaviour	0.921	0.921	0.896	0.943
Financial Knowledge -> Financial Attitude	0.810	0.810	0.739	0.873
Financial Knowledge -> Financial Capability	0.858	0.858	0.823	0.890
Financial Behaviour -> Financial Attitude	0.851	0.852	0.783	0.909
Financial Capability -> Financial Behaviour	0.877	0.877	0.840	0.910
Financial Capability -> Financial Attitude	0.875	0.875	0.800	0.938

Table 4. One-sample Kolmogorov-Smirnov test

		Financial Knowledge	Financial Behaviour	Financial Attitude	Financial Capability
N		530	530	530	530
Normal Parameters a,b	Mean	530	-.0001	.0001	.0000
	Std. Dev.	.0000	1.00091	1.00084	1.00090
	Absolute	1.00091	.139	.172	.128
Most Extreme Differences	+ive	.105	.139	.133	.120
	-tive	.105	-.126	-.172	-.128
Kolmogorov-Smirnov Z		2.407	3.198	3.966	2.954
Asymp. Sig. (2-tailed)		.000	0.000	0.000	.000

a. Test distribution is Normal.
b. Calculated from data.

Through employing both "Fornell-Larcker Criterion" & "Heterotrait-Monotrait Ratio (HTMT)", discriminant validity is assessed for constructs. As per Fornell-Larcker criterion the sq. root of AVE for every construct (displayed in Table 2) are greater than that construct's correlation with the other ones [50], therefore fullfills the discriminate validity criteria. On the other side, HTMT is used to check external consistency of constructs [51] which is helpful in overcoming inadequacy in cross loadings & Fornell-Larcker Criterion [52] The permissible value for HTMT is anything less than 1 [51]. Since, all values (shown in Table 3) are found less than threshold value, all constructs are valid enough to meet criteria of suitability.

5.2 Test of normality of data

Data normality is a mandatory requirement that must be fulfilled in every parametric test. The normality test can be done using various methods, one of them using the Kolmogorov-Smirnov method. A data can be said to be normal if it has a significance value of more than 0.05 (sig.> 0.05). Conversely the data is said to be abnormal if it has a significance value of less than 0.05 (sig. <0.05). Normality test was done for all selected models before framing hypothesis testing. The results of the normality test with Kolmogorov-Smirnov can be seen in the Table 4.

Normality test results obtained from above Table 4 can be seen that all variable data have a significance value of less than 0.05 so that the whole can be concluded that the data distribution is not normal. Testing the hypothesis can be done using the non-parametric test.

5.3 Status of financial attitude, behaviour, knowledge and capability in working women with different personalities

William Cooper and Lowry [53] developed a personality profiling technique and he classified personality of person into four categories (i.e., orange, gold, green and blue). Different colored personality consists of significant number of characters [53]. Kruskal-Wallis test was applied to understand the significance of difference in Financial Attitude, Behaviour, Knowledge and Capability in working women with different personalities.

Table 5. Results of Kruskal Wallis test

	Ranks		
Personality Type		**N**	**Mean Rank**
Financial Knowledge	Orange	199	240.89
	Green	68	303.46
	Blue	122	291.20
	Gold	141	259.69
	Total	530	
Financial Behaviour	Orange	199	237.95
	Green	68	297.06
	Blue	122	288.54
	Gold	141	269.23
	Total	530	
Financial Attitude	Orange	199	231.28
	Green	68	294.76
	Blue	122	307.48
	Gold	141	263.36
	Total	530	
Financial Capability	Orange	199	231.36
	Green	68	306.56
	Blue	122	297.93
	Gold	141	265.82
	Total	530	

Table 6. Chi-Square test

	Test Statistics		
	Financial Knowledge	**Financial Behaviour**	**Financial Attitude**
Chi-Square	12.968	12.429	22.269
df	3	3	3
Asymp. Sig.	.005	.006	.000

a. Kruskal Wallis Test
b. Grouping Variable: personality Type

As per the results of Kruskal Walis test, it is found that the mean scores of Financial Behaviour, Financial Capability and Financial Knowledge for the green personality women are the

highest, that shows that the working women having Green Personality are found superior. While, working women having blue personality characteristics, have comparatively better financial attitude (Table 5).

As per Table 6 it is revealed that at 5% significance level Financial Attitude, Financial Behaviour, Financial Capability and Financial Knowledge of working women having different personalities differ significantly.

5.4 Interaction between FK, FB, FA, FC with personalities

In order to achieve final outcomes of hypothesis testing of structural equation model is required subsequently the assessment of PLS algorithm. In order to validate connection amongst constructs path coefficient are often used. Simply Partial Least Square (PLS) is a regression model in a form of path model that is capable of managing number of dependent variables with one/more dependent variables [54].

Model fit:

Table 7. Fitness test of proposed model

	Saturated Model
SRMR	0.072
Chi-Square	9551.540
NFI	0.884

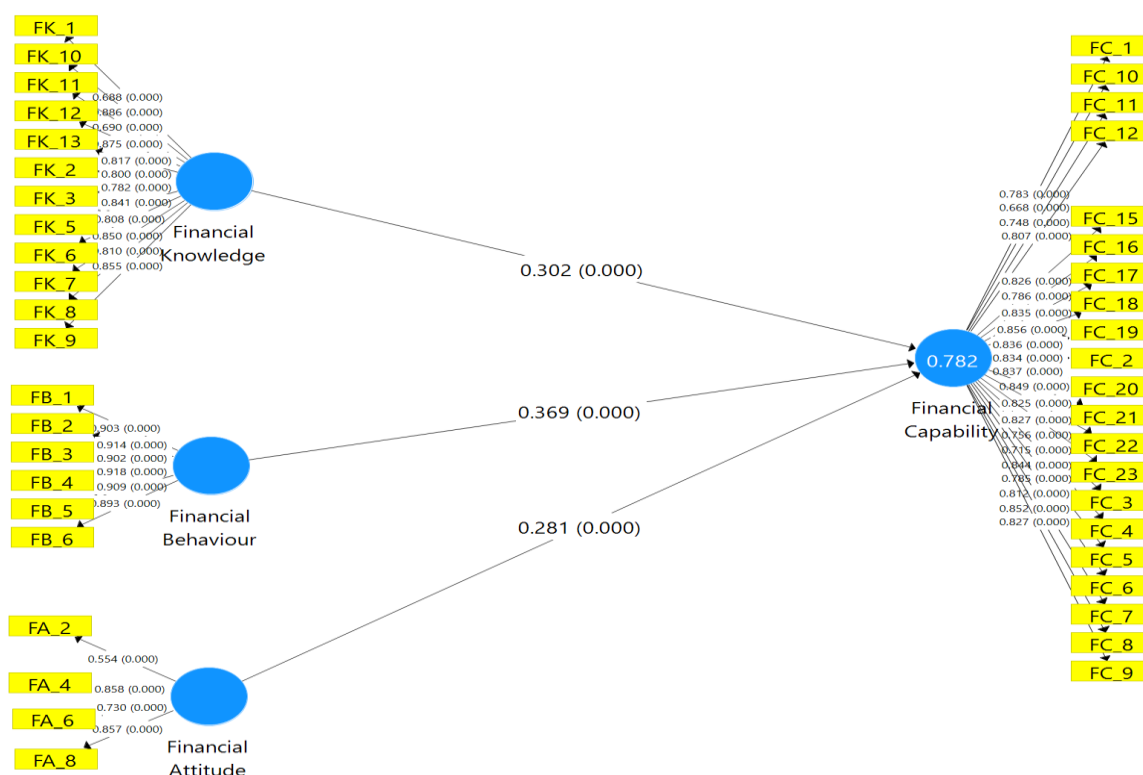The Chi-square (9551.540) is found significant at 5% level of significance (p value, 0.00), according to the data displayed in Table 6. The proposed research model's approximation model fit is measured using SRMR (standardized root mean square residual). A model is considered to have an adequate fitness of model whenever "SRMR" is < 0.08 [54]. Value of SRMR =0.072< 0.08 (shown in Table 7). Therefore, the proposed model is suitable for analysis of data.

Impact of Financial Knowledge (p value, 0.00), Financial Behaviour (p value, 0.00) and Financial Attitude (p value, 0.00) upon Financial Capability is found significant since the p value are found less than significant level at 5% level of confidence and t statistics value for these three constructs (*Financial Knowledge, Financial Behaviour and Financial Attitude*) is found greater than 1.96 [55] (shown in Table 8).

Thus, Financial Knowledge, Financial Behaviour and Financial Attitude of a working woman altogether has significant impact of 78.2% (shown in Figure 2) on their Financial Capabilities.

5.5 Influence of 'FK', 'FB', and 'FA' on the 'FC' of female employees with divergent personalities

Since the pervious results through SEM modelling have proven that Financial Attitude, Financial Behaviour, Financial Capability and Financial Knowledge altogether impact Financial Capability of working women having different personalities. Furthermore, to establish this framework for working women with different personalities, multiple regression method was employed.

Figure 2. Measurement model

Table 8. Result of hypothesis

	Hypothesis	Path Coefficient	P Values	Hypothesis Result
H1	Financial Knowledge -> Financial Capability	0.302	0.000	H1 Accepted
H2	Financial Behaviour -> Financial Capability	0.369	0.000	H2 Accepted
H3	Financial Attitude -> Financial Capability	0.281	0.000	H3 Accepted

Table 9. Results of regression analysis

Personality Type		R	R²	Adj. R²	Standard Error of estimate	R² Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
					Model Summary b		**Change Statistics**				
Orange	1	.949a	.901	.900	.37004	.901	594.490	3	195	.000	2.025
Green	1	.780a	.608	.590	.59889	.608	33.078	3	64	.000	1.523
Blue	1	.866a	.751	.744	.47866	.751	118.360	3	118	.000	1.881
Gold	1	.789a	.622	.614	.45363	.622	75.200	3	137	.000	1.500

a. Predictors: (Constant), Financial Knowledge, Financial Attitude, Financial Behaviour
b. Dependent Variable: Financial Capability

Table 10. ANOVA

ANOVAᵃ

Personality Type			Sum of Squares	df	Mean Square	F	Sig.
Orange	1	Regression	244.205	3	81.402	594.490	.000b
		Residual	26.701	195	.137		
		Total	270.906	198			
Green	1	Regression	35.592	3	11.864	33.078	.000b
		Residual	22.955	64	.359		
		Total	58.546	67			
Blue	1	Regression	81.356	3	27.119	118.360	.000b
		Residual	27.036	118	.229		
		Total	108.392	121			
Gold	1	Regression	46.425	3	15.475	75.200	.000b
		Residual	28.192	137	.206		
		Total	74.617	140			

a. Dependent Variable: Financial Capability
b. Predictors: (Constant), Financial Knowledge, Financial Attitude, Financial Behaviour

Table 11. Personality-wise regression analysis

personality Type			Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
								Correlations			**Collinearity Statistics**	
Orange	1	(Constant)	-.023	.027		-.876	.382					
		Financial Knowledge	.305	.062	.291	4.953	.000	.901	.334	.111	.146	6.837
		Financial Behaviour	.275	.076	.256	3.634	.000	.920	.252	.082	.102	9.808
		Financial Attitude	.434	.050	.440	8.590	.000	.917	.524	.193	.192	5.200
Green	1	(Constant)	.100	.075		1.334	.187					
		Financial Knowledge	.161	.150	.170	1.074	.287	.695	.133	.084	.245	4.075
		Financial Behaviour	.363	.155	.396	2.342	.022	.742	.281	.183	.215	4.662
		Financial Attitude	.290	.106	.294	2.748	.008	.667	.325	.215	.536	1.866
Blue	1	(Constant)	.019	.045		.413	.681					
		Financial Knowledge	.152	.087	.153	1.749	.083	.774	.159	.080	.276	3.622
		Financial Behaviour	.610	.085	.638	7.198	.000	.851	.552	.331	.269	3.720
		Financial Attitude	.164	.059	.153	2.776	.006	.579	.248	.128	.692	1.446
Gold	1	(Constant)	.032	.038		.835	.405					
		Financial Knowledge	.514	.088	.578	5.811	.000	.774	.445	.305	.279	3.584
		Financial Behaviour	.112	.090	.127	1.238	.218	.708	.105	.065	.264	3.789
		Financial Attitude	.144	.068	.148	2.137	.034	.579	.180	.112	.579	1.727

a. Dependent Variable: Financial Capability

In Table 10, at 5% level of significance; Financial Attitude, Financial Behaviour, Financial Capability and Financial Knowledge have significant impact on Financial Capability of working women having different personalities.

Mostly Financial Attitude, Financial Behaviour, Financial Capability and Financial Knowledge of working women with orange personality have 90.1% impact on their financial capability (Table 9). Financial Knowledge of working women with gold personality influences their financial capability (Beta, 0.578) most. While, Financial Behaviour is the major influencer of financial capability of working women with green (Beta, 0.396) & blue (Beta, 0.638) personalities. Financial Attitude of working women with orange personality influences their financial capability (Beta, 0.44) most (Table 11).

6. FINDINGS & DISCUSSION

Financial Attitude, Financial Behaviour & Financial Knowledge have a positive effect on Financial Capability of working women. Higher the Financial Attitude, Financial Behaviour & Financial Knowledge, the higher Financial Capability of working women will be. The appropriate attitude, behaviour and knowledge about monetary management influences how a working woman manages her finances and enhances financial capability. This study backs up earlier studies [35, 56, 57]. From daily and regular expenses to long-term budget projections, financial knowledge is vital for working women to manage both domestic & professional life. Sound financial knowledge laid a profound impact and improves the skills to stipulate security & prosperity in the life. Financial knowledge refers to an individual's basic understanding of financial concepts, which allows them to better manage their financial challenges and safeguard their financial strength and progress [58, 59].

Financial behaviour is a critical factor in determining financial capability [60, 61]. Higher financial capability is associated to more favorable and risk-less financial behaviour. Higher level of knowledge leads to better financial behaviour, which in turn leads to greater financial competence and regulation. With superior capability, an individual can upgrade financial plans, financial obligations, and cash flows [16]. It is discussed that Financial attitude expresses implicit beliefs, which can influence behavioural intentions. While, it is discussed in the context of finance, attitude is defined as an opinion and an approach about how an individual manages his financial affairs and makes sound and improved financial decisions [62]. Attitude refers to one's confidence in making sound financial decisions, and it influences one's financial capability [63]. It is also proved that improved attitudes boost financial capability [64]. A working woman is financially capable if she can make value-added financial decision. It was discovered that improving working women's financial knowledge, financial behaviour, and financial attitude can improve their financial capability.

Since the findings suggested that financial knowledge, behaviour, attitude and capability are significantly different for working women with different personalities. Furthermore, it was also discovered that the out-tern of financial knowledge, behaviour and, attitudinal-perspective on the financial capability significantly vary for working women of divergent personalities (gold, orange, green and blue). Therefore, it can be concluded that personality of working women has

mediating role on their financial capability. Working women having different personalities would have different spending/ savings habits, their attitude towards financial decisions might not be that much similar and all might not have same level of knowledge to take financial decisions. Thus, for working women having traits of different personalities would not be similarly financially capable. In generally persons with green personality have more affinity to discover new insights from available information, they mostly have analytical mind and good research skills. They take decisions based on facts & figures and they majorly strive to foster thoughtful considerations [22]. Persons who come under blue color personality category, are more emotional, noble, and sympathetic and mostly take emotion driven decisions [65]. Apart from it, Financial Attitude was found most appropriate for working women having gold personality and blue personality. Individuals with traits blue personality, are more concerned and patient in nature. While, persons with traits green personality are more practical thinker which appears prominently on their behaviour [53]. Individuals with orange personalities are renowned as risk-takers and have good entrepreneurial skills [24].

7. CONCLUSION

The impetus of this research is to investigate the effect of 'financial knowledge', 'financial behaviour' and, 'financial attitude' upon 'financial capability' and the moderating role of personality on working women. Three important findings from this study are highlighted based on the conceptual framework that includes financial knowledge, behaviour attitude capability and personality traits. Firstly, Financial Attitude, Financial Behaviour, and Financial Knowledge have a favorable impact on working women's financial capability. Secondly, financial behaviour is a critical aspect that forms financial competence, and third, the impact of financial knowledge, conduct, and attitude on financial capability differs considerably across working women with varied personalities. (gold, orange, green and blue). As a result, it may be concluded that working women's personalities play a moderating role in their financial potential. The study is limited to a group of urban working women in the state of Rajasthan only. The moderating role of digital financial awareness can be analyzed on financial knowledge, financial attitude, financial behaviour and financial capability.

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