

## Navigating the Paradox of FOMO and Faith: A Multidimensional Clustering of Women's Financial Management Behavior

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### ABSTRACT

This research offers a novel integration of psychological drivers (FOMO) and sociocultural values (religiosity) within a multidimensional clustering framework to analyze women's financial behavior in the Tapal Kuda region. By employing the Fuzzy Possibilistic C-Means (FPCM) algorithm, this study maps the heterogeneity of financial conduct across variables of age, literacy, and consumption patterns. Analyzing survey data from 384 respondents, the FPCM approach successfully identified four distinct behavioral archetypes: Good, Moderate, Poor, and Extreme Consumption. Empirical findings reveal a significant generational divide: women aged 25–34 exhibit the highest financial resilience, while the 18–24 cohort remains the most vulnerable within the 'Poor' cluster. Paradoxically, the 45–54 age group shows a high propensity for 'Extreme Consumption' where modern psychological pressures (FOMO) frequently override religious discipline. Technical analysis further confirms that excluding age as a clustering variable produces a more robust and balanced distribution. These results provide a foundation for specialized financial inclusion programs that must shift beyond basic literacy to include psychological mitigation of FOMO, ensuring long-term financial stability tailored to specific demographic profiles.

Keywords: Consumption Patterns; Financial Management; Clustering FPCM; Women's Profile; Horseshoe Region



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### INTRODUCTION

The evolution of modern society increasingly demands women's active participation in various aspects of life, including education, employment, and strategic decision-making, domains that were once predominantly associated with men. Consequently, it is crucial to foster awareness regarding the importance of women's roles in the current era of gender equality. One essential domain is financial management, where women are expected to acquire the ability to manage their finances effectively to achieve financial independence. This issue is particularly urgent given the rising cost of living in Indonesia. Bank Indonesia's Consumer Survey (June 2023) revealed that low-income

households face considerable financial pressures, marked by high relative costs of living and declining savings. Simultaneously, their debt-to-income ratio has increased, underscoring the critical need for women to enhance their financial management skills (Inayati et al., 2024). Financial behavior is influenced not only by gender but also by inherent characteristics and socio-demographic factors such as age and religion. For instance, younger women tend to exhibit more impulsive spending compared to older women, while religious practices often encourage better financial discipline. Furthermore, differences in financial literacy and consumption behavior affect women's financial management. Women, in particular, are often more responsive to visual appeal (such as color and form) rather than functional aspects of products, making them more susceptible to persuasive sales tactics and frequent shopping activities (N. Putri et al., 2023).

Alongside these behavioral differences, the rapid expansion of digital technologies and e-commerce has transformed consumption patterns, contributing to the rise of Fear of Missing Out (FOMO). FOMO reflects the anxiety that others are experiencing opportunities or satisfaction that one is missing, leading to a continuous desire to stay connected (Gartner et al., 2022). This behavior directly impacts financial management and may exacerbate poor spending habits. Therefore, it is critical to investigate how these dynamics shape women's financial practices, especially as women face unique challenges in financial inclusion compared to men, such as limited financial literacy (Igamo et al., 2024). Despite these insights, a significant research gap remains. Most existing literature investigates financial literacy, religiosity, or psychological factors in isolation, failing to address the complex paradox where deep-seated sociocultural values (faith) collide with modern psychological triggers (FOMO). There is a lack of empirical evidence regarding how these conflicting forces interact to shape behavioral archetypes. Even individuals with relatively high incomes or adequate literacy continue to face financial difficulties due to irresponsible money management practices and attitudes (Shinta & Lestari, 2019). This study addresses this gap by mapping these dynamics within the Tapal Kuda region, comprising Pasuruan, Probolinggo, Lumajang, Jember, Situbondo, Bondowoso, and Banyuwangi, an economically developing area with significant potential in East Java. The novelty of this study lies in its unique integration of religiosity, financial literacy, and the FOMO phenomenon within a multidimensional clustering framework.

Unlike traditional linear models, this research employs the Fuzzy Possibilistic C-Means (FPCM) algorithm. The FPCM approach provides a distinct academic contribution because it demonstrates superior performance in handling the heterogeneous, fuzzy, and non-absolute nature of socio-economic data compared to conventional statistical methods (Rajkumar et al., 2019; KINANTI et al., 2021; Özdemir & Kaya, 2019). By incorporating both the fuzziness of membership and possibilistic typicality, this study offers a robust mapping of women's profiles that has been largely overlooked in regional financial studies (G. N. S. Putri et al., 2022; Faizana et al., 2025). Previous research has confirmed that FPCM is particularly suitable for analyzing socio-economic data that is typically non-absolute (Kurniasari et al., 2024; Aghyari & Kudus, 2023). Consequently, the research problem is formulated as follows: How can women's financial management profiles be classified through the interplay of religiosity, financial literacy, and FOMO-driven consumption? The primary objective is to classify these behavioral patterns to serve as a foundation for designing cluster-based financial literacy programs tailored to the specific profiles of women in the region.

## LITERATURE REVIEW

### **Theoretical Foundation: Behavioral Finance and Social Influence**

This study is grounded in Behavioral Finance Theory, which posits that financial decisions are not purely rational but are heavily influenced by psychological biases and cognitive limits. Unlike traditional finance, this framework acknowledges that emotions and social pressures, such as the anxiety of being left behind, can override logical economic planning. Complementing this, Social Influence Theory explains how an individual's financial conduct is shaped by the norms and expectations of their social environment, including religious communities and digital social

networks. The interplay between these theories provides a robust lens to analyze the tension between internal discipline (faith/literacy) and external pressures (FOMO).

### **The Dual Role of Religion and Age in Financial Governance**

Religion acts as a normative anchor in financial behavior, exerting a considerable impact on money management through ethical doctrines. Beyond mere ritual, religious engagement shapes how individuals approach saving and budgeting by emphasizing discipline and social responsibility, such as zakat or almsgiving (Puspitasari et al., 2024). However, the influence of religion is not monolithic; it can indirectly foster financial inclusion by providing access to knowledge within faith-based groups (Mulyadi et al., 2023), while simultaneously imposing doctrinal restrictions like the prohibition of *riba* (interest), which dictates the investment strategies of Muslim women (Rahmatia et al., 2022). This religious influence interacts dynamically with Age, a key demographic determinant of risk tolerance and maturity. Under the Life-Cycle Hypothesis, financial behavior evolves as individuals age; younger women often exhibit more extravagant, trend-driven consumption due to lower financial experience, whereas older women prioritize stability and cautious long-term planning (Laily, 2016; C. Wijaya et al., 2018). Empirical evidence suggests that maturity typically brings greater discipline in money handling (Adityandani & Haryono, 2019). Yet, age alone is often insufficient to guarantee financial health if not supported by adequate literacy and favorable psychological conditions (Gedela, 2012).

### **Financial Literacy and the Paradox of Modern Consumption**

Financial Literacy represents the cognitive capability required to navigate complex economic environments. It serves as a critical buffer against unplanned consumption; women with higher literacy levels tend to maintain consistent saving habits and make informed investment decisions even under financial pressure (Nirmala et al., 2024; H. R. Wijaya et al., 2024). In the digital era, literacy is increasingly linked to the strategic use of financial technology (fintech), which simplifies budgeting and payments (Aprisanty et al., 2024). However, a “literacy-behavior gap” often emerges when cognitive knowledge meets Consumption Patterns driven by social media. While high literacy correlates with financial discipline (Hilgert et al., 2003), modern women are frequently more responsive to visual appeal and persuasive digital marketing than functional utility (N. Putri et al., 2023). This suggests that even literate individuals may engage in impulsive spending if they lack the emotional regulation to resist market-driven trends (Susanti, 2021; Wijayanti & Santoso, 2022).

### **The FOMO Phenomenon: A Driver of Financial Instability**

The Fear of Missing Out (FOMO) is a psychological manifestation of social influence theory. It creates a continuous desire to stay connected with experiences enjoyed by others, often leading to unplanned purchases in fashion and technology (Gartner et al., 2022; Alfina et al., 2023). FOMO intensifies the anxiety of being left behind, which directly impairs an individual’s ability to distinguish needs from wants. This psychological pressure is amplified by e-commerce and social media algorithms, posing a significant challenge to long-term financial security (Alutaybi et al., 2020; Hodgkinson, 2019). Consequently, FOMO acts as a disruptor to traditional financial management, potentially overriding the discipline instilled by religious values or financial education.

### **Synthesis and Research Framework: Financial Management**

Financial Management is the outcome of the interplay between these cognitive, psychological, and sociocultural factors. It involves the disciplined ability to plan, allocate, and monitor resources to achieve Family stability (N. Yunita, 2020; Sukirman et al., 2019). Effective management mitigates risks such as excessive debt and misallocation of resources (Susanto & Fatimah, 2024). The conceptual linkage explored in this study suggests that women’s financial management is not a linear result of any single variable. Instead, it is a multidimensional profile where religiosity and literacy act as “stabilizers,” while FOMO and youth act as “disruptors.” Because these variables often overlap for example, a religious woman may still experience high FOMO, traditional classification is inadequate. This justifies the use of the Fuzzy Possibilistic C-Means (FPCM) algorithm, which

can analyze these “fuzzy” boundaries to identify distinct behavioral clusters. This analytical framework allows for a more nuanced understanding of women’s financial archetypes in the Tapal Kuda region.

## METHOD

### Sampling and Data Collection

This study utilizes both primary and secondary data. Primary data was collected through questionnaires distributed across seven regions in the Tapal Kuda area (Lumajang, Jember, Banyuwangi, Situbondo, Bondowoso, Pasuruan, and Probolinggo). The sampling technique employed a proportional cluster random sampling method. The sample size was determined using Cochran’s Formula to ensure representative data from a total female population of 4,014,600. where  $Z=1.96$  a 95% confidence level,  $p = 0.5$ ,  $e = 0,05$ , the minimum required sample is 384 respondents. The distribution of questionnaires was adjusted proportionally to the population of each district (see Table 1).

The following data presents the number of women across age strata ranging from 18 years to 55 years and above in the Tapal Kuda region. Data from Statistics Indonesia (Badan Pusat Statistik/BPS), accessed through its official website in 2024, shows that the female population in the Tapal Kuda region is unevenly distributed across its districts. Jember records the highest number of women with 1,293.7 thousand individuals, followed by Banyuwangi with 897.7 thousand, and Pasuruan with 653.7 thousand. Meanwhile, Lumajang has 469.4 thousand women, Bondowoso has 309.2 thousand, Situbondo has 267.2 thousand, and Probolinggo reports the lowest number at 123.7 thousand women. Overall, the total number of women across the seven districts in the Tapal Kuda region reaches 4,014.6 thousand. This suggests that the concentration of the female population is more prominent in larger districts such as Jember, Banyuwangi, and Pasuruan. In contrast, smaller areas like Probolinggo and Situbondo host relatively fewer women.

Based on this demographic information, the distribution of questionnaires for each area has been determined to ensure a representative sample:

**Table 1. The Distribution of Questionnaires for Each Area**

Lumajang	469.4	11.7 %	45
Jember	1,293.7	32.2 %	124
Banyuwangi	897.7	22.4 %	86
Situbondo	267.2	6.7 %	26
Pasuruan	653.7	16.3 %	63
Probolinggo	123.7	3.1 %	12
Bondowoso	309.2	7.7 %	28
<b>Total</b>	<b>4,014.6</b>	<b>100 %</b>	<b>384</b>

Source: Processed from Statistics Indonesia (Badan Pusat Statistik/BPS), 2024

### Variable Operationalization

To ensure clarity and replicability, the variables are measured using a 1-10 Semantic Differential Scale, where 1 represents the lowest/negative pole, and 10 represents the highest/positive pole. This scale provides higher granular sensitivity for fuzzy clustering compared to a standard 5-point Likert scale. The study includes several variables and corresponding question indicators as follows:

**Table 2. Operationalization of Variables and Indicators**

Variable	Operational Definition	Indicators	Scale
Age	The chronological age of the respondent at the time of the survey.	•Age in years (Ratio Data)	Ratio

<b>Religiosity</b>	The degree to which religious values and spiritual commitment guide individual financial decisions and ethics.	<ul style="list-style-type: none"> <li>•Frequency of participation in religious activities.</li> <li>•Influence of religious doctrines on spending and saving discipline (Puspitasari et al., 2024).</li> </ul>	1–10 (Semantic Differential)
<b>Consumption Patterns</b>	The behavioral tendency of individuals in allocating their income between functional needs and lifestyle-driven desires.	<ul style="list-style-type: none"> <li>•Ratio of income spent on basic needs vs. lifestyle desires.</li> <li>•Frequency of shopping activities.</li> <li>•Consistency in routine saving habits (N. Putri et al., 2023).</li> </ul>	1–10 (Semantic Differential)
<b>FOMO (Fear of Missing Out)</b>	The psychological anxiety or social pressure to follow current trends, often leading to impulsive economic choices.	<ul style="list-style-type: none"> <li>•Level of anxiety regarding missing out on social or consumption trends.</li> <li>•Frequency of impulsive purchases or investments triggered by social media influence (Gartner et al., 2022).</li> </ul>	1–10 (Semantic Differential)
<b>Financial Literacy</b>	The cognitive capacity and knowledge required to understand and process financial information effectively.	<ul style="list-style-type: none"> <li>•Ability to explain basic financial concepts (interest, inflation, etc.).</li> <li>•Proficiency in using money management tools and applications (Kinanti et al., 2025).</li> </ul>	1–10 (Semantic Differential)
<b>Financial Management</b>	The practical application of planning, organizing, and monitoring financial resources to achieve long-term stability.	<ul style="list-style-type: none"> <li>•Discipline in financial record-keeping and budgeting.</li> <li>•Proportion of income allocated to productive investments.</li> <li>•Effectiveness in debt control and expense monitoring (N. Yunita, 2020).</li> </ul>	1–10 (Semantic Differential)

Source: Operationalization of Variables and Indicators

### Data Preprocessing

Before performing the clustering analysis, the raw data underwent a three-stage preprocessing phase to ensure the robustness of the FPCM algorithm:

1. Data Cleaning: Screening for incomplete questionnaires or “straight-lining” responses (where respondents give the same score to all items).
2. Coding and Tabulation: Converting semantic responses into numerical values for statistical processing.
3. Data Normalization (Min-Max Scaling): Since variables like ‘Age’ have a different range than the 1-10 scale of other variables, all data were normalized to a range of [0, 1]. This prevents variables with larger numerical ranges from dominating the cluster distance calculation.

### Instrument Validity and Reliability

The questionnaire was tested using Pearson Correlation Item-Total (PCI) for validity, where an item is valid if  $r > (r_{\alpha=0,05})$ . Reliability was measured using Cronbach’s Alpha, requiring a coefficient  $\alpha > 0.60$  to be considered reliable.

### **Fuzzy Possibilistic C-Means (FPCM) Analysis**

The FPCM method was selected because it integrates the “fuzziness” of membership (FCM) and the “possibility” of typicality (PCM), making it highly effective at handling noise and outliers in socio-economic data (G. N. S. Putri et al., 2022).

#### **Justification for Four Clusters:**

The selection of four clusters is based on a synthesis of theoretical behavioral finance archetypes and empirical validation. Theoretically, four clusters allow for a distinct spectrum ranging from ideal to extreme behavior. Empirically, the optimal number of clusters is validated using:

1. Partition Coefficient (PC): Measures the degree of “clustering” (higher is better).
2. Modified Partition Coefficient (MPC): Adjusts the PC based on the number of clusters; the result is optimal when MPC approaches 1 (Nida et al., 2024).

Based on these indices, the following archetypes were identified:

1. Cluster 1 (Good): Disciplined, high literacy, strong religious influence.
2. Cluster 2 (Moderate): Average literacy, occasional impulsive spending.
3. Cluster 3 (Poor): Low literacy, poor record-keeping, vulnerable.
4. Cluster 4 (Extreme Consumption Style): High FOMO, trend-driven, high financial risk.

The analysis was performed using the MATLAB application to compute membership matrices and final cluster centers.

## **RESULTS AND DISCUSSION**

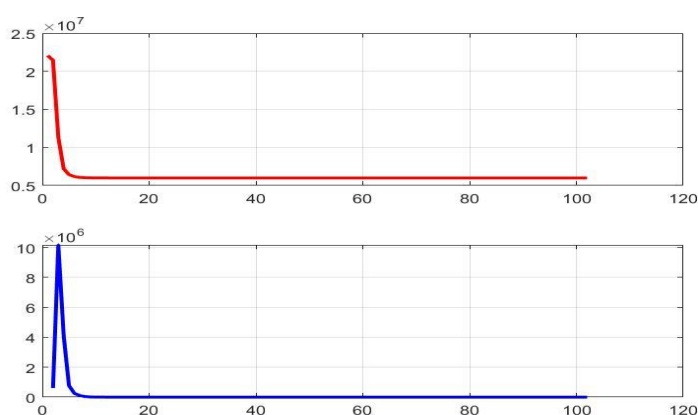
### **Validity and Reliability of The Questionnaire**

The validity of the questionnaire was assessed using the Pearson Correlation Item-Total method, which examines the correlation between each item and the total score of the corresponding variable. An item is considered valid if its calculated  $r$  value exceeds the  $r$  table value at a 5% significance level with degrees of freedom  $df = n - 2$ . The analysis indicated that most items exhibited positive and significant correlations with their respective total scores and are therefore deemed valid. Only item X23 within variable X2 showed a negative correlation with the total score, indicating it is not valid and requires revision or removal. Reliability testing was conducted to evaluate the consistency of the measurements using Cronbach’s Alpha. The results revealed that variable X1 had a Cronbach’s Alpha of 0.648, categorizing it as fairly reliable. Variable X2 had a Cronbach’s Alpha of 0.378, which is considered low, likely due to the invalid item X23. Meanwhile, variables X3, X4, and X5 yielded Cronbach’s Alpha values of 0.886, 0.902, and 0.896, respectively, indicating high reliability and strong internal consistency. Overall, the questionnaire used in this study can be considered generally valid and reliable, with the exception of variable X2, which requires improvements on the invalid item to enhance its reliability. The questionnaire’s validity was evaluated using the Pearson Correlation Item-Total method. The results indicated that all remaining items after dropping X23 and X11 showed positive and significant correlations with their respective total scores, with  $r$  values ranging from 0.442 to 0.908, confirming good validity. Reliability was assessed using Cronbach’s Alpha, yielding 0.806 for variable X2 (X2\_drop) and 0.745 for variable X1 (X12, X13, X14), indicating high and moderate reliability, respectively. These results demonstrate that the questionnaire is generally valid and reliable, suitable for measuring the intended constructs.

### **Clustering FPCM Analysis**

In this study, the clustering process was conducted using the following parameter settings: the number of clusters was set to  $c = 4$ , the fuzziness weighting exponent was determined at  $w = 1.5$ , and the typicality parameter was defined as  $\eta = 2$ . The maximum number of iterations was limited to  $MaxIter = 1000$ , with a convergence threshold of  $\epsilon = 10^{-5}$  to ensure stability and accuracy of the results. Additionally, the initial partition matrix was set at  $P_0 = 0$ , providing a neutral starting point for the clustering algorithm. These parameter configurations were chosen to balance computational efficiency with the robustness of the clustering outcomes, following common practices in fuzzy

clustering applications. Based on the results of running the Fuzzy Possibilistic C-Means (FPCM) algorithm with the fuzziness weighting exponent ( $w$ ) = 1.5 and the typicality parameter ( $\eta$ ) = 2, a convergence pattern was obtained as illustrated in the graphs. The upper graph (red line) depicts the objective function values, which initially start at around  $2.2 \times 10^7$  and then sharply decrease until stabilizing at approximately  $0.5 \times 10^7$ . This indicates that the optimization process was effective, with the algorithm reaching stability before the 100th iteration. The lower graph (blue line) shows the changes in error values or the differences between successive iterations. At the beginning, the error value is relatively high (close to  $1 \times 10^7$ ), but it rapidly declines and stabilizes near zero after approximately 15–20 iterations. This demonstrates that the convergence process occurred both quickly and efficiently. Figure 1. Graphical results of the FPCM clustering ( $w = 1.5$ ,  $\eta = 2$ ), showing cluster distribution excluding age as a variable.



**Figure 1. Graphical Results of the FPCM Clustering Excluding Age as a Variable**

Source: Clustering FPCM Analysis

With these parameter settings, the algorithm successfully achieved stable convergence and produced an optimal cluster partition. The combination of  $w = 1.5$  and  $\eta = 2$  proved effective in balancing the flexibility of fuzzy membership with the strength of possibilistic typicality, resulting in clusters that are more robust to noise and more accurate in representing the underlying data. However, this result was obtained by including the age factor as one of the clustering variables. Further analysis of each cluster and comparison with survey findings revealed that the distribution became less representative, as age turned out to have a stronger influence compared to other variables, thereby distorting the clustering results. For instance, individuals who scored positively in terms of religion and financial management but showed high levels of FOMO were classified into the “good” cluster, and vice versa. To address this issue, a second run was conducted without including age as an indicator, which produced a cluster distribution more consistent with the survey results. Based on the results of running the Fuzzy Possibilistic C-Means (FPCM) algorithm with the fuzziness weighting exponent parameter ( $w$ ) = 1.5 and the typicality parameter ( $\eta$ ) = 2, a convergence pattern was obtained as shown in the graph.

The upper graph (red line) illustrates the value of the objective function, which at the initial iteration was around  $3.6 \times 10^6$ . This value then decreased sharply and reached stability at approximately  $2.2 \times 10^6$ , with a stable condition achieved before the 100th iteration. This indicates that the optimization process was effective and produced consistent results. The lower graph (blue line) shows the changes in error values between iterations. At the beginning of the process, the error was relatively high (around  $5.5 \times 10^5$ ), but it quickly decreased and approached zero by around the 20th iteration. This demonstrates that the convergence process occurred rapidly and efficiently. The graphical output of the FPCM clustering ( $w = 1.5$ ,  $\eta = 2$ ), showing cluster distribution without age as a variable.

With these parameters, the algorithm successfully produced a stable cluster distribution that is also more aligned with the survey results. The exclusion of the age variable proved to improve the quality of cluster distribution, as age had previously tended to dominate compared to other variables. Consequently, the resulting clusters became more representative of the respondents' overall characteristics. Based on the data processing results using the Fuzzy Possibilistic C-Means (FPCM) algorithm with parameters  $w=1.5$  and  $\eta=2$ , the distribution of respondents across clusters by age category was obtained. Respondents were grouped into four clusters: Good, Moderate, Poor, and Extreme. The distribution is presented in Table 3.

**Table 3. Cluster Distribution by Age ( $w = 1.5, \eta = 2$ )**

18–24 years	35	28	60	25	148
25–34 years	41	11	24	7	83
35–44 years	13	10	23	28	74
45–54 years	7	4	8	30	49
> 55 years	5	6	5	14	30
<b>Total</b>	101	59	120	104	384

Source: Data Analysis

The results indicate that the cluster with the largest membership is Poor (120 respondents), followed by Extreme (104 respondents), Good (101 respondents), and lastly Moderate (59 respondents). The younger age group (18–24 years) dominates the sample size, with the majority falling into the Poor cluster. Meanwhile, the 25–34 years group is relatively more concentrated in the Good cluster, suggesting more stable financial behavior at productive ages. In addition to the distribution, the analysis also produced cluster profiles that describe the characteristics of respondents according to the research variables.

**Table 4. Characteristics of Respondent Clusters**

Good	Strong	Good	High	Not FOMO-driven	Good	The most financially stable group.
Moderate	Fairly good	Fairly good	Fairly good	Somewhat FOMO-driven	Fairly good	Balanced group but influenced by FOMO tendencies.
Poor	Fairly good	Fairly good	Fairly good	Not FOMO-driven	Poor	Respondents with adequate knowledge but weak financial practices.
Extreme	Average	Average	Average	Somewhat FOMO-driven	Poor	Highly vulnerable group; weak literacy and FOMO worsen financial outcomes.

Source: Data Analysis

In summary, the clustering results not only show the numerical distribution by age but also map the unique characteristics of each respondent group. These findings are valuable as a foundation for designing targeted interventions, ensuring that financial literacy and management programs are tailored to the specific needs of each cluster.

### **Behavioral Archetypes and the Literacy-Psychology Gap**

The FPCM analysis successfully identified four distinct behavioral archetypes among women in the Tapal Kuda region: Good, Moderate, Poor, and Extreme Consumption Style. The “Good” cluster

represents an ideal profile where high financial literacy and strong religious discipline act as a buffer against impulsive behavior. This finding aligns with Lusardi & Mitchell (2014), who argue that financial literacy is vital human capital for avoiding costly debt. However, the presence of the “Extreme” cluster, characterized by high FOMO and poor management, reveals a significant “literacy-behavior gap.” In this group, psychological triggers override cognitive knowledge. This supports the Behavioral Finance Theory, suggesting that emotions and social pressures (FOMO) often lead to sub-optimal economic decisions, regardless of an individual’s formal education level (Gartner et al., 2022; Alfina et al., 2023).

### **The Analytical Dominance of Age in Cluster Formation**

A critical finding in this study is the dominant role of Age in determining cluster membership. Women in the 18–24 age bracket are disproportionately represented in the “Poor” and “Extreme” clusters. This age-based vulnerability suggests a lack of “financial maturity” and a higher susceptibility to peer-driven consumption via social media. This result corroborates the findings of Adityandani & Haryono (2019), who noted that maturity typically brings greater discipline. Interestingly, when age was excluded from the clustering model, the distribution of respondents became more balanced. This indicates that age is a “noisy” or “dominant” variable that can mask other behavioral nuances. From an analytical standpoint, this suggests that while age is a strong predictor of behavior (Life-Cycle Hypothesis), financial management is also deeply rooted in personal psychology and religiosity that transcends generational boundaries. As noted by Gedela (2012), age alone does not determine saving behavior; rather, it is the interaction of age with personal attitudes and psychological resilience that dictates financial outcomes.

### **The Paradox of Faith and FOMO**

The study highlights a compelling interplay between Religiosity and FOMO. Respondents with higher religious adherence were more likely to fall into the “Good” or “Moderate” clusters, confirming that faith-based values often promote prudence and discourage extravagant spending (Puspitasari et al., 2024). However, the “Moderate” cluster shows that religiosity is not a perfect shield; many religious women still experience moderate FOMO. This creates what this study terms the “Paradox of FOMO and Faith,” where the spiritual desire for simplicity clashes with the digital-era pressure to remain socially relevant. This finding extends the work of N. Putri et al. (2023) by showing that in pluralistic and religious regions like Tapal Kuda, social influence, particularly through e-commerce and social media, can create internal conflict that weakens traditional financial discipline.

### **Practical and Theoretical Implications**

The clustering results provide several key implications for financial empowerment strategies:

1. **Specialized Financial Inclusion:** Programs should not be “one-size-fits-all.” For the Extreme Cluster (younger women with high FOMO), interventions must move beyond basic accounting to include psychological counseling on digital mindfulness and “social media literacy.”
2. **Leveraging Religious Networks:** For the Moderate Cluster, religious organizations can be used as vehicles for financial education, framing financial discipline as a spiritual responsibility to enhance receptivity (Mulyadi et al., 2023).
3. **Theoretical Contribution:** This study contributes to social influence theory by demonstrating that FPCM is a superior tool for capturing the “fuzzy” boundaries of human behavior. It proves that financial management is a multidimensional construct where demographic (age), cognitive (literacy), psychological (FOMO), and sociocultural (religion) variables must be analyzed simultaneously to understand modern consumption.

## **CONCLUSION**

This study provides a primary contribution to financial behavior literature by integrating psychological drivers (FOMO) and sociocultural anchors (Religiosity) into a multidimensional classification model. Through the application of the Fuzzy Possibilistic C-Means (FPCM) algorithm,

this research successfully maps the heterogeneity of women's financial conduct in the Tapal Kuda region into four distinct clusters: Good, Moderate, Poor, and Extreme Consumption Style. The findings prove that financial literacy alone is insufficient; psychological pressures and age-related factors significantly determine financial vulnerability, even among those with strong religious values. Policy and managerial implications derived from these findings suggest a shift from generalized financial inclusion programs toward targeted, cluster-based interventions:

1. For Policy Makers: Financial literacy programs should incorporate “Digital Mindfulness” and psychological management modules to mitigate the impact of FOMO, particularly for younger demographics.
2. For Financial Institutions: There is a need to develop communication strategies that leverage local religious community networks to enhance financial discipline within the moderate clusters.
3. For Program Managers: Educational approaches must be customized; the “Extreme” cluster requires assistance in impulsive consumption control, while the “Poor” cluster needs strengthening in basic financial record-keeping skills.
4. While this study notes limitations regarding the dominance of the age variable in initial modeling, the results provide a robust foundation for context-specific women's economic empowerment. Future research is encouraged to explore the role of Financial Technology (Fintech) and conduct longitudinal analyses to capture the evolving nature of women's financial behavior in the digital era.

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