

# Decoding the Cognitive-Conative Path: Validating a Sequential Antecedent Model of Financial Behaviour Using Structural Equation Modeling (SEM)

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## **Abstract:**

**Background:** Conventional as well as contemporary financial literacy research frameworks frequently exhibit a persistent “Knowledge-Behaviour Gap”, indicating the failure of the Knowledge-Attitude-Behaviour (KAB) model, which fails to trace the psychological progression from initial awareness to tangible financial actions, thereby neglecting the critical pre-cognitive catalysts, essential for transitioning passive information into active financial engagement.

**Materials and Methods:** The current research attempts to resolve this shortcoming, by introducing and validating a sophisticated 11-latent structural path model grounded in cognitive-conative theory, mapping how external environmental stimuli (Financial Exposure) and intrinsic, value-based appraisals (Financial Importance) activate the human mind to drive diverse financial behaviours. Utilizing a robust primary dataset of 1,221 State Government employees in Pune City, India, (collected in the year 2017) the research evaluates a six-stage sequential trajectory mapped across a psychological triangle of Cognitive (Exposure to Knowledge), Affective (Attitude) and Conative (Behaviour) dimensions. The study uses a rigorous two-step Structural Equation Modeling (SEM) approach, incorporating Confirmatory Factor Analysis (CFA) for the measurement model and Path Analysis for the structural framework, to simultaneously evaluate the fit indices of this multi-stage architecture.

**Results:** The structural analysis confirms that financial literacy is not a static competency, but a dynamic evolutionary progression. While possessing in-depth knowledge is a mandatory requirement for developing an attitude, it is the internalization of the importance of this knowledge that provides the vital conative motivation needed to execute financial planning. Statistically validating this entire sequential framework, the global structural model demonstrated an exceptional fit to the empirical data ( $GFI > 0.90$ ,  $CFI > 0.90$ ,  $RMSEA < 0.08$ ).

**Conclusion:** Although derived from the 2017 baseline data, this model remains highly relevant today, due to its focus on invariant psychological paths, rather than volatile market trends. It provides a permanent cognitive architecture that explains how environmental and psychological triggers activate financial behaviours, moving policy formulation away from passive information dissemination towards targeted financial behavioural wellness design.

**Key Word:** Financial Literacy, Financial Exposure, Financial Importance, Financial Behaviour, Public Sector Employees, Structural Equation Modelling (SEM).

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## I. Introduction

“An investment in knowledge pays the best interest.” - Benjamin Franklin

“Having information on investing is one thing. Knowing what to do with it is something else entirely.” - Don Connelly

Within the contemporary macroeconomic environment, a critical behavioural paradox persists: despite the exponential proliferation of complex financial products and the democratization of market information, actual individual participation in the financial ecosystem remains structurally inadequate. This disconnect underscores a systemic market failure, demonstrating that the expanding supply of financial infrastructure and information has failed to logically translate into active, diversified conative behaviour among individuals.

Thus, the aforesaid aphorism by Benjamin Franklin which has also served as a foundation of the traditional prototype of financial literacy initiatives for centuries together, is in contrast to the contemporary financial behavioural evidence which suggests that the significance of such investments in knowledge is often lost in translating it into financial outcomes, revealing a “Knowledge-Behaviour Gap”, indicating that cognitive

understanding fails to manifest as conative action in a linear fashion. This dissonance is more precisely captured by Don Connelly, because it is within this “something else” - (the structural bridge between possessing information and executing behaviour) that the current study is positioned.

Thus the Knowledge, Attitude and Behaviour (KAB) model is inadequate as it ignores the foundational precursors essential to activate the mind, thereby challenging the conventional financial literacy models based on the assumption that financial literacy is a static, purely cognitive state, emphasizing on the “one-size-fits-all” approach.

While financial products evolve, the cognitive architecture used to process them remains constant, as financial literacy is an evolutionary process commencing from the “pre-cognitive” catalysts (Financial Exposure and Perceived Financial Importance). Without these initial environmental stimuli, the cognitive engine remains dormant. Crucially, Exposure alone is passive; Perceived Financial Importance acts as the ultimate psychological gatekeeper and conduit, determining whether an individual will transition from merely possessing raw information to actively becoming equipped to execute it.

## II. Problem Statement

A lasting contradiction in behavioural finance, known as the “Knowledge-Behaviour Gap” occurs when individuals possess a theoretical understanding of financial concepts but fail to apply them in the execution of effective personal financial planning. Furthermore, empirical evidence demonstrates that individual participation across the diverse spectrum of personal financial planning, especially sophisticated, market-linked financial instruments, remains structurally minimal, owing to following reasons:

- a) **The Pre-Cognitive Discrepancy:** Existing literature lacks a definitive explanation regarding the “internal switch” which helps an individual transition from passive awareness to in-depth knowledge acquisition.
- b) **Intervening Frailties:** There is a critical dearth of empirical literature evaluating Financial Exposure and Financial Importance as foundational gatekeepers in the financial literacy pipeline.
- c) **The Negligence of Technical-First Methodologies:** Conventional financial literacy initiatives focus heavily on delivering technical “In-depth Knowledge” (e.g., inflation, compounding, interest mechanics) without first establishing the psychological anchor of “Perceived Importance”, resulting in a severe lack of behavioural impact and low long-term retention rates.
- d) **Lack of Path Consistency and Structural Validation:** While isolated variables (such as financial attitude) have been independently researched, contemporary literature lacks a comprehensive, empirically validated framework capable of tracing the entire, multi-stage trajectory from initial Financial Exposure to final conative behaviour. Without identifying exactly where this decision-making process stumbles, macro-level policy interventions remain ineffective.

Addressing these limitations, this study tests a six-stage, 11-latent path model on 1,221 public sector employees. It provides a precise diagnostic blueprint determining where financial decision-making breaks down, offering highly generalizable societal insights.

## III. Scope of the Study

The scope of this study encompasses the following:

### 1) Substantial Thematic Exploration

The research incorporates the entire gamut of personal financial planning, including budgeting, debt management, tax planning, risk management and insurance planning, retirement planning and estate planning.

### 2) Conceptual and Behavioural Range

Rather than investigating macroeconomic variables or external market conditions, this study focuses entirely on the micro-level internal mechanics of human decision-making as follows:

- a) **Precursors:** Evaluating Financial Exposure (environmental stimuli) and Financial Importance (subjective value appraisal) as the primary pre-cognitive catalysts.
- b) **Conduit:** Tracks the transformation of these precursors through In-depth Knowledge (Cognitive), Financial Attitude (Affective) and ultimately mapping them onto a broad spectrum of conative Financial Behaviours.
- c) **Model Limits:** The study is circumscribed by a newly developed 11-latent structural path model containing specific hypothesized direct and indirect structural pathways.

### 3) Dimensional Coverage

The study charts the Tripartite view of Psychology, validating the structural sequence from Cognitive (Exposure to In-depth Knowledge) to Affective (formation of Short Term Attitudes and Long-term Attitudes) to Conative (Behavioural Implementation).

#### **4) Demographic and Temporal Zone**

The empirical scope is restricted to State Government employees within Pune City. While the descriptive financial literacy scores naturally reflect the baseline dataset of 2017, the analytical scope of this paper explicitly transcends seasonal or volatile market trends. The study contends that while digital financial tools, tax slabs, and specific investment instruments change over time, the deep-seated psychological pathways connecting stimulus (Exposure and Importance) to action (Planning Behaviour) remain structurally invariant, making the 2017 dataset a primeval, stable baseline for validating a permanent psychological architecture that remains universal and timeless.

#### **5) Research Methodological Precision**

The study is bounded by a primary sample of 1,221 respondents and the analytical scope is restricted to the execution of a two-step Structural Equation Modeling (SEM) framework. The first phase is bounded by a Confirmatory Factor Analysis (CFA) to validate the measurement model and the second phase is strictly confined to Path Analysis using maximum likelihood estimation to determine global model fit indices (GFI, CFI, RMSEA).

### **IV. Rationale for the Study**

The justification for this research is rooted in a combination of following factors:

#### **1) The Behavioural Paradox and the Market Failure of Information**

Despite accessibility to financial information through digital platforms, regulatory disclosures and institutional awareness campaigns, empirical findings disclose frustrating market failures, with inadequate participation of the people across the full spectrum of personal financial planning, revealing a stark Knowledge-Behaviour Gap. This disproves the time-honoured assumption that investing in pure information will linearly result in rational financial action, thereby suggesting an urgent need to investigate the hidden “structural bridge” where this cognitive-to-conative transition breaks down.

#### **2) Bridging the “Cognitive-Conative” Void via Pre-Cognitive Catalysts**

The core contribution of this research is identifying the “Internal Switch” of the financial mind - a combination of Financial Exposure and Financial Importance within the Cognitive dimension that activates latent knowledge, as necessary precursors to behavioural action (Conation). Thus this study provides the rationale for shifting from “technical-first” methodologies to “behaviour-first” frameworks, as without understanding how an individual values their financial goals (Importance), technical concepts like compounding or inflation rates remain completely unabsorbed.

#### **3) The Macro-Economic Imperative: Shift towards Personal Responsibility**

The social shift in India marks the emergence of nuclear families, coinciding with a critical financial transition from guaranteed, defined-benefit pensions to market-driven, defined-contribution plans, longer life-expectancies, economic volatility, inadequate personal financial planning expertise. This study is justified by providing a framework as to how to help people in adopting rational financial behaviours.

#### **4) Methodological Rigor and Model Reliability**

Unlike typical small-sample studies, this research is justified by its high statistical power a sample size of (N=1,221). By employing Structural Equation Modelling (SEM) to confirm 11 latent factors, this study aims to transition from mere behavioural “snapshots” to a structural validation of the financial mind, ensuring the model’s universal and timeless relevance.

#### **5) Diagnostic Value for Stakeholders**

This study is justified by its actionable insights for financial planners, regulators, and educators to create targeted, stage-specific interventions, by confirming the sequence from Exposure to Financial Behaviour. It shifts financial education from a generic, one-size-fits-all model to a precise approach that addresses the exact psychological barrier in financial decision making.

#### **6) Invariance of the Psychological Architecture (The 2017 Baseline Justification)**

Finally, the rationale for utilizing the 2017 baseline dataset rests on the scientific distinction between market trends and structural psychology. While financial products, digital applications and tax regulations fluctuate constantly, the core cognitive-conative architecture of the human brain remains constant over time.

### **V. Objectives of the Study**

The paper aims:

- 1) To empirically substantiate a six-stage progressive path model of financial literacy, tracing the trajectory from initial Financial Exposure to Perceived Importance to Awareness to In-depth Knowledge to Financial Attitude and ultimately to conative Financial Behaviour by means of rigorous Structural Equation Modeling (SEM).
- 2) To assess how the cognitive shift from external environmental stimuli (Financial Exposure) to internal value appraisal (Financial Importance) structurally impacts personal financial planning behaviours.

- 3) To analyze the psychological role of “Perceived Importance” as the critical entry point and foundational catalyst for converting passive awareness into active financial knowledge acquisition and behaviour.
- 4) To investigate the mediating role of Financial Attitude (the affective component) between an individual’s technical financial competency (In-depth Knowledge) and their final conative decision-making execution.
- 5) To provide the stakeholders like policy makers and financial institutions with a robust framework for implementing, evidence-based initiatives that convert passive information dissemination into active financial participation.

## **VI. Review of Literature**

### **A. Research articles on Conceptualization of Financial Literacy: The Failure of the KAB Triplet**

Research within behavioural economics requires a rigorous, scientific conceptualization of its constructs to ensure logical operationalization and to accurately map the structural pathways between exogenous and endogenous variables. However, extant literature, evaluating financial literacy reveals severe conceptual fragmentations. A foundational critique indicates that landmark studies such as those by (Cutler et al, 1996; Chen et al, 1998 and 2002; O’Neill et al, 2003; Danes et al, 2004; Avard et al, 2005; Chen et al, 2005; Manton et al, 2006; Robb et al, 2008; Agarwal, 2015 and Yurtkur, 2025) frequently fail to provide a conceptual definition of “financial literacy”. Furthermore, across an expansive body of research (Volpe et al., 1996; Hilgert et al., 2003; Lusardi et al, 2007a, 2007b, 2008a; Kadoya et al., 2020), the construct has been defined superficially or used interchangeably with distinct terms like “Financial Knowledge” or “Financial Capability”. This lack of standardization has complicated the unique components of the financial decision-making pipeline. While recent institutional and academic frameworks (e.g., Hung et al., 2009; Remund, 2010; Atkinson et al, 2012; OECD, 2014, 2015; Kumar et al, 2019; Erol, 2021) utilize a more comprehensive, multi-dimensional approach encompassing knowledge, skills, attitudes, and behaviours, however a critical gap still persists. Within these contemporary architectures, the vital pre-cognitive precursors of Financial Exposure and Financial Importance remain entirely conspicuous by their absence.

### **B. Research articles on the Traditional Paradigm and the “Knowledge-Behaviour Gap”**

Earlier financial literacy research based on the classical economic assumptions, basically the standard human capital theory (Becker, 1964), postulated that financial education is a direct investment in human capital with measurable outcomes in the form of rational decision-making. This thought led to the Knowledge-Attitude-Behaviour (KAB) framework (Hilgert et al, 2003), operating on a flat, linear path, assuming that information dissemination obviously leads to positive financial attitudes, which then translates into sound financial choices. However, current empirical research findings across behavioural economics and personal finance indicate severe market failure within this linear model, in the form of a persistent “Knowledge-Behaviour Gap” (Mandell et al, 2009; Fernandes et al, 2014). Researchers have recurrently revealed a negative correlation between exceptionally high scores on objective financial literacy metrics (like understanding compound interest or inflation mechanics) and long-term personal financial planning activities like budgeting, debt management, and the like, thereby indicating the truncated and incomplete approach.

### **C. Research articles on Significance of Financial Socialisation in Financial Behaviours: Financial Exposure as a Pre-Cognitive Catalyst**

Traditional behavioural finance models bypass the environmental triggers launching the cognitive journey. This omission compromises educational initiatives that mistakenly assume imparting information automatically fosters positive financial habits. However, empirical research demonstrates that technical knowledge alone cannot drive long-lasting financial behavioural changes (NEFE, 2006), rendering a purely cognitive view of financial literacy outdated (Gudmunson et al, 2011). Thus the cognitive-conative psychological theory dictates that decision-making requires initial environmental stimuli to activate the mental apparatus (Hilgard, 1980). In personal finance, this catalyst is captured by Financial Exposure.

Addressing conventional limitations, behavioural scholars are tracing cognitive processes to their origins. Grounded in Bandura’s (1986) Social Cognitive Theory, psychological frameworks indicate that cognitive development requires environmental interaction; as cognition cannot occur in a vacuum. In personal finance, this foundational step is Financial Exposure, encountering financial systems via education, workplace or media. Without these external anchors, the cognitive apparatus remains dormant, rendering subsequent educational interventions ineffective because the consumer lacks a contextual frame of reference.

Research on structural financial socialization underscores that individuals lacking deliberate environmental exposure remain fundamentally isolated from the financial ecosystem (Shim et al., 2010). Grounded in social learning and consumer socialization paradigms, behavioural trajectories are heavily

modelled by proximal networks, such as family, peers and co-workers (Rimer et al, 2005). Empirically financial exposure occurs through diverse environmental channels, spanning primary childhood socialization, ambient parental modelling, workplace discussions and active or passive information-seeking (Lusardi et al., 2010).

Consequently, early-stage or ambient exposure functions as the foundational catalyst necessary to prepare the cognitive apparatus for complex learning (Clarke et al., 2021). Peer networks, digital media and internet consumption heavily dictate consumption dynamics and baseline product mindfulness (Lachance et al, 2007), while macro-level media exposure directly influences broader financial decision-making architectures (Loibl et al, 2006). Ultimately, integrated social stimuli, comprising direct parental mentorship, peer interactions and targeted media channels, exert a significant positive influence on an individual's long-term personal financial management behaviour (Goyal et al., 2023).

#### **D. Research articles on Significance of Financial Importance in Financial Behaviours**

While exposure establishes the external environment, cognitive psychology dictates that external stimuli cannot influence human behaviour unless they undergo an internal appraisal process (Lazarus, 1991). Information devoid of perceived personal value is discarded by the brain before transitioning into long-term memory or operational awareness. According to Self-Determination Theory (Deci & Ryan, 2000), internalizing knowledge requires intrinsic motivation, making financial choices because they are personally meaningful and aligned with individual goals. This psychological alignment fosters positive behaviours like consistent saving, higher self-efficacy, and greater overall financial well-being.

Consequently, if exposure is the external spark, an internal mechanism must determine whether that spark catches fire. This introduces subjective valuation, defined here as Financial Importance. Behavioral scholars confirm that motivation serves as the primary engine of conation (Bagozzi, 1992). The structural limitation of early literacy frameworks lies in their obsession with objective measurement while ignoring subjective evaluation. This cognitive bias was dismantled by (Lind et al, 2020), who demonstrated that an individual's value-based appraisal dictates long-term actions far more than objective scores. Technical data remains functionally impractical until an individual attaches personal significance to it.

#### **E. Research Articles on Significance of Financial Attitude as an Affective Mediator**

Acquired financial knowledge must pass through an evaluative phase before manifesting as behaviour, a process governed by the Affective component (Eagly et al, 1993). In behavioural finance, financial attitude represents this psychological tendency to evaluate money management practices with some degree of approval or disapproval (Parrotta et al, 1998).

While basic regressions merely show isolated correlations between attitude and behaviour, advanced structural equation models demonstrate that the affective dimension plays a complex, mediating role (Shome et al., 2022). Specifically, attitude acts as the conduit translating objective technical competency into subjective intent. By splitting attitude into nuanced components - short-term financial orientations versus long-term planning mindsets, the researchers can map how deeply held beliefs mitigate or augment the execution of sophisticated financial actions.

#### **Research Gap**

In personal finance literature, "Financial Behaviour" is frequently downplayed or reduced to isolated metrics like savings habits or credit card usage (Xiao, 2008). However, holistic financial well-being demands execution across a diversified, comprehensive spectrum of wealth management activities. (Altfest, 2004) emphasizes that these components are deeply interdependent. Navigating this multi-dimensional spectrum requires high-level cognitive processing and sustained conative motivation, necessitating a unified, sequential path model to understand how individuals manage the entire wealth lifecycle.

However, existing literature is limited by a fragmented, truncated scope that predominantly focuses on the correlations between Awareness, Knowledge and Behaviour, bypassing the pre-cognitive precursors that initiate the decision-making pipeline. Specifically, there is a systemic neglect of Financial Exposure as a baseline catalyst and Financial Importance as a structural gatekeeper.

To resolve this methodological limitation, contemporary scholars advocate using Structural Equation Modeling (SEM) via a two-step approach: Confirmatory Factor Analysis (CFA) to validate measurement models, followed by Path Analysis to evaluate global architectures (Hair et al., 2010). This study addresses this fundamental gap by validating an integrated, 11-latent sequential framework on a robust, high-statistical-power sample (N = 1,221), establishing a stable blueprint of the invariant cognitive-conative path.

## **VII. Theoretical Underpinnings and Psychological Frameworks**

### **A. Conceptualisation of the Construct Financial Literacy**

To enable logical model operationalization, this study defines financial literacy as: “a measure of the degree to which one possesses the competency to manage personal finances, for enhancing participation in economic life, while being mindful of life events and changing economic conditions”. Rather than a static metric, this competency structurally integrates Financial Knowledge (Cognitive component, comprising Financial Exposure, Financial Importance, Financial Awareness, and Extensive Financial Knowledge), Financial Attitudes (the Affective component) and Financial Behaviour (the Conative component) governing practical financial decision-making.

### **B. The Six Stages of Adult Financial Literacy Development**

The trajectory of the human financial mind is proposed to progress sequentially through six evolutionary developmental phases across four core psychological dimensions:

#### **1) The Pre-Cognitive Dimension: The Baseline and Motivation**

##### **Stage 1: The Activation Stage (Financial Exposure)**

As financial acumen is never innate, an individual must first experience an external environmental catalyst to develop it. In this study, it indicates people being introduced to financial concepts via formal education, workplace socialization (such as a circular on the National Pension Scheme), brochures or financial planning workshops. In the absence of this spark, an individual remains in a state of financial dormancy.

##### **Stage 2: The Internalization Stage (Financial Importance)**

Following external exposure, the cognitive apparatus evaluates personal utility: “Does this matter to me or Is it important for me?” In this study, this is a crucial “Internal Switch” essential for deeper learning. Employees realize that relying on a market-linked Defined Contribution plan means their financial future depends entirely on personal planning. Without this realization, any prior information is discharged as extraneous.

If adults do not go through the pre-cognitive stage of recognizing the importance of financial literacy, they are less likely to seek out education or apply it. Therefore, initiatives intended to improve adult financial literacy must focus first on creating an understanding of the Importance of money and its management, rather than just delivering information.

#### **2) The Cognitive Dimension: Possessing the Competency**

##### **Stage 3: The Mindful Stage (Financial Awareness)**

Once Importance is internalised, the individual develops an intensified state of sensitivity and alertness to the financial environment. In the context of this study, it implies that the employee is now “mindful” and possesses a baseline recognition of financial instruments (e.g., they know what mutual funds, tax-saving bonds, or health insurance policies are) without necessarily mastering their deeper operational mechanics.

##### **Stage 4: The Proficiency Stage (In-depth Financial Knowledge)**

The individual transitions from basic mindfulness to technical mastery, combining theoretical comprehension with practical involvement. In the context of this study the employee masters the specialized know-how and technical expertise regarding financial planning activities, by comprehending tax slabs, compounding frequencies, insurance policy clauses and investment risks. This finalizes the cognitive “competency” building block.

#### **3) The Affective Dimension: Psychological Disposition**

##### **Stage 5: The Alignment Stage (Financial Attitude)**

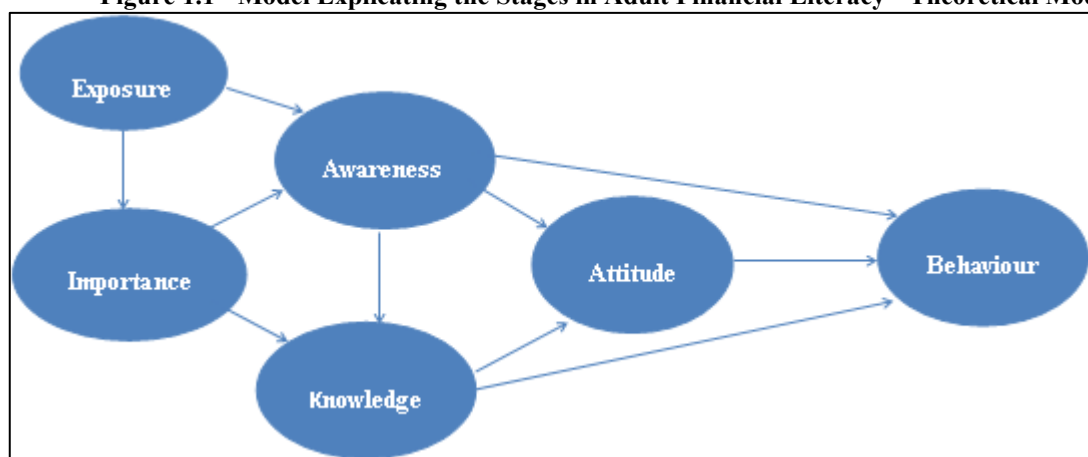
Utilizing advanced cognitive proficiencies, the individual cultivates a stable psychological disposition toward financial management. In the context of this study it implies the development of a stable psychological tendency or an outlook regarding Short Term and Long Term financial planning activities. This attitude serves as the mental readiness or “bridge” that prepares the individual to transition from abstract theory to a real-world decision.

#### **4) The Conative Dimension: Behavioural Execution**

##### **Stage 6: The Operational Stage (Financial Behaviour)**

The culminating stage of maturity, characterized by the execution of psychological goals into concrete, real-world behaviours. In the context of this study, the individual actively executes financial decision-making across the personal financial planning spectrum, including cash and debt management (Loans/Cards), risk mitigation (Income Tax and Insurance Planning), and long-term wealth preservation (Future Planning and Estate Planning), ultimately enhancing their “participation in economic life”.

Figure 1.1 - Model Explicating the Stages in Adult Financial Literacy - Theoretical Model



### C. Psychological Framework for Validating the Pre-Cognitive Gatekeepers of Financial Literacy

Three major psychological frameworks validate the critical positioning of the “Importance” conduit within this structural decision-making pipeline in this study:

#### 1) Self-Determination Theory (SDT) – Deci and Ryan (1985, 2000)

This theory postulates that human behaviour operates along a motivational continuum, regulated by a psychological mechanism known as **Organismic Integration**, which dictates how individuals internalize external regulations and transform them into self-determined, autonomous actions. To transition from external information to self-regulated action, an individual must progress along a psychological continuum from External Regulation (behaviour driven by outside compliance or mandates) to Identified Regulation (behaviour driven by personal valuation and internalization of an outcome)

**Correlation to the Model:** The stage of Financial Exposure is merely an external stimulus representing External Regulation. If the employee fails to assign Financial Importance to that Exposure, the information is rejected by the mind. The path from Importance to Awareness (0.433) empirically validates SDT: an individual only becomes consciously alert and mindful (Awareness) of financial information once they perceive its personal utility and value (Importance).

#### 2) The Elaboration Likelihood Model (ELM) – Petty and Cacioppo (1986)

This Model is a dual-process framework of cognitive processing and attitude formation that outlines how individuals evaluate persuasive communications or raw information. It identifies two distinct analytical pathways: the Central Route, which involves rigorous, deep, and systematic cognitive elaboration and the Peripheral Route, which relies on shallow, superficial cues and surface-level heuristics.

The principal determinant governing whether an individual utilizes the central route or the peripheral route is Personal Relevance. When an issue carries high personal significance, the cognitive apparatus engages in deep, systematic processing of the information, which ultimately fosters permanent, resilient alterations in attitude and drives long-term behavioural execution.

**Correlation to the Model:** Financial Importance is the exact operationalization of ELM’s “Personal Relevance”. When the State Government employees realize that the transition to a Defined Contribution scheme threatens their retirement security, their perceived Importance spikes. This forces their cognitive processing down the Central Route. The Model proves this because Importance acts as the conduit to In-depth Financial Knowledge and Awareness, which ultimately feeds into stable, long-term conative execution like Estate Planning (0.178) and Income Tax/Insurance Planning (0.921).

#### 3) Cognitive Appraisal Theory of Emotion and Coping – Lazarus (1966, 1991)

This theory describes how individuals psychologically evaluate and navigate environmental stressors or structural changes. This cognitive framework partitions the processing mechanism into two distinct phases: Primary Appraisal, where the individual assesses the personal significance and potential threat of the situation, and Secondary Appraisal, where they evaluate their available coping resources and behavioural options to manage the change.

In Primary Appraisal, an individual evaluates an environmental event to determine: “Am I at risk? Does this matter to my well-being?” If the event is deemed irrelevant, no further cognitive or coping resources are deployed.

**Correlation to the Model:** The macroeconomic shift from Defined Benefit to Defined Contribution is the environmental stressor introduced during Financial Exposure. The variable, Financial Importance, captures the Primary Appraisal phase. If the employee’s primary appraisal concludes that this economic shift is highly

important to their survival, they activate their secondary appraisal mechanisms, seeking In-depth Knowledge and developing the necessary Financial Attitudes to execute coping mechanisms.

Traditional KAB models assume adults are purely rational economic agents who absorb all information. The aforesaid psychological models postulate that the adult mind filters everything through a lens of personal significance first.

## **VIII. Material and Methods**

### **Research Design and Conceptual Framework**

To ensure empirical validity, statistical power, and structural reliability, this study adopts a causal-explanatory research design, by testing a predetermined, theoretically grounded structural architecture. The conceptual framework organizes 11 latent constructs into a six-stage sequential trajectory based on the Tripartite view of psychology: From Financial Exposure to Perceived Importance to Awareness to In-depth Knowledge to Financial Attitude to Financial Behaviour.

### **A. Sampling Design and Data Collection**

#### **Target Population**

The target population is strictly defined as State Government Employees stationed within the municipal and administrative limits of Pune City, Maharashtra, India. This population is actively navigating a critical macroeconomic transition from guaranteed defined-benefit pensions to market-linked defined-contribution systems (e.g., the National Pension System).

#### **Sampling Technique and Sample Size**

**Sampling Method:** A multi-stage stratified random sampling technique was deployed across various state government departments (including administrative secretariats, educational institutions and public works divisions) in Pune City.

**Sample Size (N):** A total of 1,221 valid responses were secured. This massive sample size provides exceptional statistical power ( $> 0.95$ ), minimizes the margin of error, and completely satisfies the strict data density requirements for complex Structural Equation Modeling (which typically demands a minimum ratio of 10–15 observations per estimated parameter).

#### **Data Collection Instrument**

Primary data was gathered via a highly structured, close-ended, self-administered psychometric questionnaire, structured into distinct modules, like Demographic Profile, Psychometric Latent Scales and Objective Competency Blocks measuring the 11 latent constructs.

### **B. Operationalization and Measurement of Variables**

To execute a two-step Structural Equation Modeling (SEM) analysis, the 11 latent constructs comprising the multi-stage structural model are operationalized and measured across three core psychological dimensions:

#### **1) Financial Knowledge (the Cognitive Component) – comprises of the following:**

This study breaks down the cognitive dimension into four distinct, sequentially dependent constructs:

##### **a) Financial Exposure**

This is measured as practical engagement with financial planning through educational settings, professional environments and informational resources like corporate newsletters or industry workshops. It is this active ongoing interaction that acts as the foundational link leading to a deeper understanding and appreciation of Financial Importance.

##### **b) Financial Importance**

Operationalised as an individual's appreciation of the subjective value of personal financial planning activities for enabling financial decision making. It empowers individuals in better money management and serves as a natural stepping stone to increasing financial awareness.

##### **c) Financial Awareness**

Distinct from deep knowledge, awareness is operationalized as being conscious of and attentive to the financial environment, representing a broad, surface-level understanding of financial concepts rather than technical expertise.

##### **d) Extensive Financial Knowledge**

This competency represents a comprehensive, objective mastery of personal finance, integrating theoretical knowledge with practical application. A deficiency in this area frequently results in severe financial errors and heightened psychological stress.

#### **2) Financial Attitude (the Affective Component)**

The Oxford Dictionary defines Attitude as a settled way of thinking or feeling. It represents an individual's settled psychological disposition or orientation towards personal financial management practices, serving as a

critical intermediary step in shaping everyday financial behaviours. To maximize model precision, Financial Attitude is bifurcated into two operational constructs:

- a) **Short-Term Attitude:** The psychological disposition driving immediate, routine financial behaviours, specifically Budgeting and the management of Short-Term Loans/Credit Cards.
- b) **Long-Term Attitude:** The psychological mind-set dictating complex, future-focused financial behaviours, specifically Insurance, Retirement and Estate Planning.

**3) Financial Behaviour**

This encompasses all actions regarding money management, such as cash, credit and investment handling (Xiao, 2008). In this study, the term specifically refers to practical execution of comprehensive personal financial planning practices. This is vital because, while financial knowledge is important, translating that knowledge into practical habits, such as budgeting, saving, and smart investing, is what truly drives success.

**C. Data Relevancy and Robustness: The Temporal Baseline Defence**

Although the primary data was collected in 2017, the study retains significant theoretical and practical relevance today. Rather than offering a transient “snapshot” of volatile market trends, fluctuating interest rates or shifting product popularities, this research validates the permanent structural and psychological pathways that govern consumer financial decision-making, a cognitive architecture that remains highly stable over time.

Additionally, the expansive sample size of 1,221 respondents establishes a statistically robust baseline that captures the fundamental behavioural adaptations of public sector employees navigating India’s landmark pension reforms and digital financial transition. Because these structural connections, such as the critical conduit linking perceived importance to knowledge acquisition are foundational to human psychology, they provide a durable, long-term framework for designing contemporary and future policy interventions.

Empirically, this model was validated using a remarkably robust and extensive sample of 1,221 State Government employees in Pune City. This stands in stark contrast to the majority of contemporary studies, which frequently rely on significantly smaller, less reliable and often biased online convenience samples.

Secondly, despite our rapid migration into a highly digitalized economic era, the fundamental psychological architecture, specifically, the cognitive sequence through which the human brain transitions from external exposure to internal valuation and ultimately to knowledge synthesis, remains structurally unchanged.

Finally, the study's methodological integrity is underscored by its use of path analysis and Structural Equation Modeling (SEM), ensuring exceptionally high statistical power and mathematical validity for the tested pathways.

**IX. Results and Discussion**

**Statistical Analysis Framework**

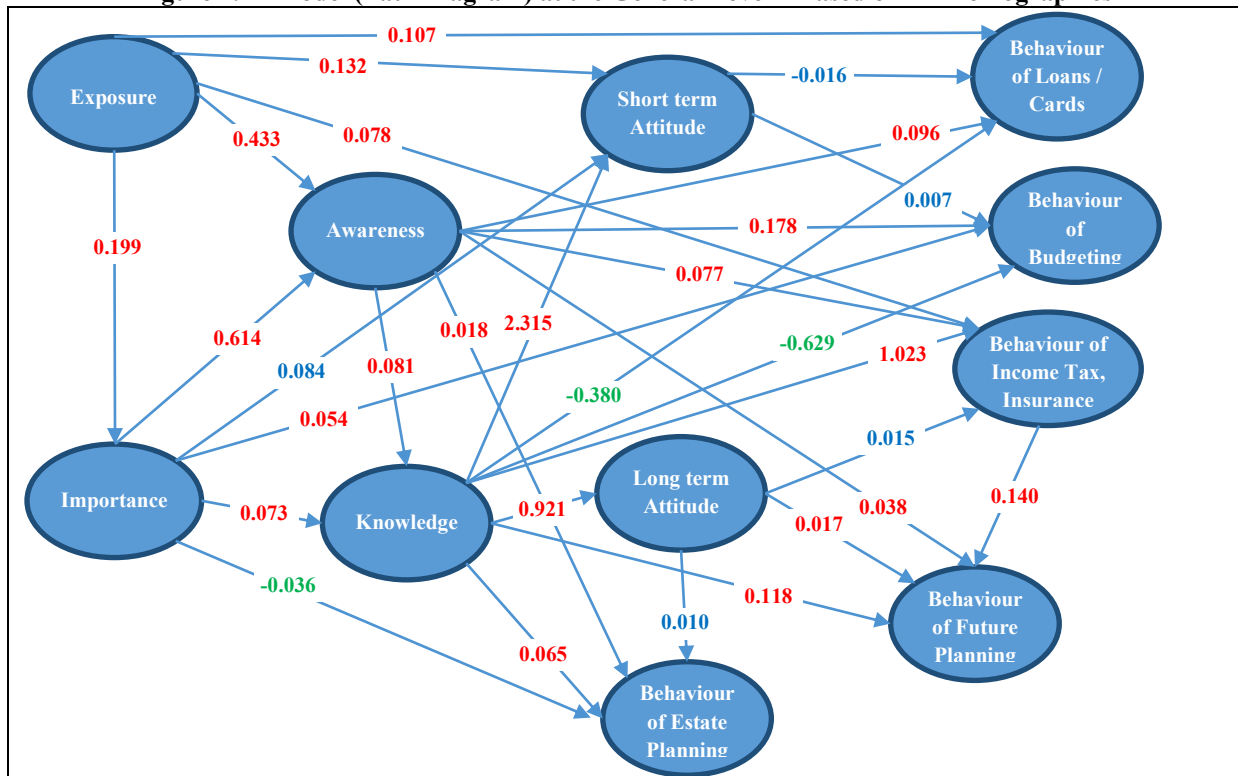
Prior to evaluating the structural directional pathways of the 11-latent model, a Confirmatory Factor Analysis (CFA) was conducted to assess the fit of the measurement model.

**Table No. 1 - Goodness of Fit Measures (Confirmatory Factor Analysis)**

	Value	Recommended
No. of Parameters	245	
Chi Square	5903.67	
DF	2681	
RMSEA	0.031	<0.05
CFI	0.928	>0.9
NFI	0.876	>0.9
RFI	0.868	>0.9
IFI	0.928	>0.9
GFI	0.883	>0.9
PNFI	0.824	>0.5
AGFI	0.873	>0.5
PGFI	0.809	>0.5

As displayed in Table 1, the measurement model demonstrates strong psychometric validity. Crucially, the Root Mean Square Error of Approximation (RMSEA = 0.031) is well below the strict 0.05 cut-off, indicating an exceptionally clean fit that avoids model over-specification. Furthermore, comparative and parsimonious fit indices, including the CFI (0.928), IFI (0.928), and PNFI (0.824), easily cross their respective recommended baselines, confirming that the 11 latent constructs are structurally stable and ready for final path estimation.

Figure 1.2 - Model (Path Diagram) at the General Level – Based on All Demographics



Note: Co-efficients / paths highlighted in red indicate a statistically significant direct positive relationship between latents, those highlighted in green show a statistically significant direct negative relationship between latents and those highlighted in blue indicates no relationship between latents.

The model was successfully estimated using Maximum Likelihood Estimation. Once the measurement framework was cleared via CFA, the structural path linkages mapping the six-stage sequential trajectory were estimated. The global structural model’s fit to the primary dataset was evaluated using a comprehensive battery of absolute and incremental fit indices, as detailed in Table 2.

Table No. 2 - Goodness of Fit Measures (General Level-Based on all Demographics)

Test Statistic	Value	Recommended
# of Parameters	45	
$\chi^2$	114.99	
Df	20	
RMSEA	0.062	<0.1
CFI	0.970	>0.9
NFI	0.965	>0.9
RFI	0.902	>0.9
IFI	0.971	>0.9
GFI	0.983	>0.9
AGFI	0.943	>0.9

The structural model fit statistics presented in Table 2 demonstrate an outstanding alignment with empirical realities. The absolute fit metrics are highly optimal, highlighted by a GFI of 0.983 and an AGFI of 0.943, confirming that the structural model accounts for the vast majority of the variance observed within the sample.

Additionally, the incremental fit metrics show superior strength, with a Comparative Fit Index (CFI = 0.970) and Normed Fit Index (NFI = 0.965) approaching near-perfect thresholds. An RMSEA of 0.062 firmly satisfies the standard requirements for structural path models, proving that the multi-stage pipeline is mathematically sound.

## **Hypotheses Testing and Path Interpretation**

Based on the globally validated structural model, the following empirical pathways are established:

### **SEM and Path Model Results**

#### **Concluded hypotheses from the total model:**

- a) Exposure has statistically significant positive impact on Importance, Awareness, Short Term Attitude, Behaviour of Loans/Credit Cards, Behaviour of Income Tax/Insurance.
- b) Importance has statistically significant positive impact on Awareness, Knowledge, Short Term Attitude, Behaviour of Budgeting, but has a negative impact on Estate Planning.
- c) Importance has a statistically significant positive impact on Behaviour of Future (Retirement) Planning and Behaviour of Estate Planning via Knowledge and also through Long Term Attitude. Although, the direct path from Importance to Behaviour of Estate Planning is showing a negative impact.
- d) Exposure and Importance has statistically significant positive impact on Awareness and in turn on Knowledge. Through Knowledge it positively impacts both Short Term Attitude and Long Term Attitude and these Attitudes in turn on all Behaviours of Financial Planning.
- e) Importance and awareness has statistically significant positive impact on Knowledge.

This indicates a crucial role played by the pre-cognitive antecedents – Financial Exposure and Financial Importance in this sequential Path Model.

## **X. Recommendations**

Based on the empirically validated structural pathways established in the 11-latent model, the following strategic recommendations are provided for policymakers, financial advisors and regulatory bodies:

### **1) Shift from Information Dissemination to Internalization**

Since Financial Importance is confirmed as a critical structural gatekeeper to Awareness ( $\beta = 0.433$ ), financial literacy initiatives must move away from standard classroom-style teaching of “technical formulas” and focus heavily on “Need-Based Valuation”. Interventions must emphasize the personal relevance of financial planning to trigger the “Internal Switch” required for behavioural change.

### **2) Target the Awareness Hub for High-Impact Behaviours**

Given that Awareness has a massive total impact on complex behaviours like Income Tax and Insurance Planning (0.921), marketing and educational efforts should prioritize “Comprehensive Awareness” over “Granular Knowledge”. Awareness acts as the primary cognitive engine that converts theoretical knowledge into practical behaviour.

### **3) Recognize Behavioural Specificity and Trigger-Mapping**

The structural model reveals that distinct personal finance behaviours require entirely different psychological pathways. For instance, the path driving Loans/Credit Card Behaviour is statistically negligible ( $\beta = 0.007$ ), confirming that credit acquisition is largely driven by impulsive or administrative reflexes. Conversely, Estate Planning ( $\beta = 0.178$ ) demands a far deeper, multi-stage psychological journey. Financial institutions and advisors must therefore customize their communication strategies based on where a specific financial product sits along the Cognitive-Conative trajectory.

### **4) Leverage Multi-Channel Exposure as a Pipeline Feeder**

While Exposure to Knowledge (0.199) is a significant path, its impact on final behaviour is indirect. Therefore, “Exposure” should be used as a broad-spectrum stimulus to feed the pipeline, but it must be immediately followed by “Importance-building” activities to prevent leakage in the decision-making process.

## **Directions for Future Research**

The model in this study can be replicated to test its validity for other sectors as well. Researchers can build upon this foundational baseline by introducing digital interaction variables such as “Fintech App Engagement” or “Digital Nudge Frequency” as structural moderators to evaluate how modern technological interfaces alter or accelerate the path from Exposure to final Financial Behaviour.

## **XI. Conclusion**

The structural validation of the 11-latent model confirms that financial planning is a sequential psychological evolution rather than a product of isolated knowledge. By addressing the research gap regarding pre-cognitive triggers, this study decodes the transition from environmental stimuli to conative action. Grounded in Bandura’s Social Cognitive Theory, Self-Determination Theory, and the Elaboration Likelihood Model, the findings structurally explain the “Internal Switch” converting passive information into comprehensive personal financial planning. Empirical evidence from 1,221 respondents indicates that the traditional Awareness-Knowledge-Behaviour model is fundamentally incomplete. Path analysis proves that Perceived Financial Importance and Financial Exposure form the bedrock of the entire system. Without the internal valuation of

“Importance,” progression toward complex behaviours like Income Tax/Insurance Planning or Estate Planning stagnates, regardless of technical knowledge scores.

The model reveals nuanced, indirect pathways governing long-term wealth preservation. High perceived importance can cause cognitive overload, directly hindering complex behaviours like Estate Planning. However, when Importance is systematically channelled through In-depth Knowledge and Long-Term Affective Attitudes, this anxiety-induced freeze is neutralized, driving execution. Consequently, the traditional “Knowledge-Behaviour Gap” is actually a “Valuation Gap.” This high-predictive framework offers a durable diagnostic tool for modern economies, shifting focus from what consumers know to how they decide to act.

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