

# Human Biases, Financial Choices and HR Systems: Evidence from a Systematic Survey of Literature

Rajib Bhattacharya<sup>1</sup>, Lopamudra Roy<sup>2</sup>,  
Smita Chakraborty<sup>3</sup>, Pramit SenGupta<sup>4</sup>

<sup>1</sup>Associate Professor, <sup>2,3,4</sup>Assistant Professor

<sup>1,2,3</sup>NSHM Business School, NSHM Knowledge Campus, Kolkata Group of Institutions

<sup>4</sup>Army Institute of Management, Kolkata.

## Abstract:

Traditional models of finance and human resource management (HRM) assume that individuals within organisations make rational and well-informed financial decisions. However, a growing body of evidence from behavioural economics and behavioural finance challenges this assumption, demonstrating that cognitive biases, heuristics, and contextual constraints systematically influence both employee and managerial choices. Against this backdrop, the present study undertakes a systematic review of the literature at the intersection of behavioural finance and HRM, with a particular focus on employee cognitive biases and firm-level financial decision-making. Adopting a PRISMA-aligned review methodology, the study synthesises theoretical, empirical, and methodological contributions spanning retirement saving behaviour, financial literacy, incentive design, employee ownership, managerial biases, and scarcity effects. The review highlights those behavioural deviations e.g. inertia, present bias, overconfidence, loss aversion, and mental accounting, play a central role in shaping workplace financial outcomes. Evidence suggests that HR policies grounded in rational-choice assumptions often fail to achieve intended objectives, while behaviourally informed interventions e.g. defaults, commitment devices, simplified choice architectures, and context-sensitive programs, consistently improve participation and decision quality. At the firm level, the review shows that managerial and professional biases influence capital allocation, risk-taking, and governance outcomes, underscoring the strategic importance of HR systems in mitigating behavioural distortions. At the employee level, financial stress and scarcity emerge as powerful moderators that limit the effectiveness of education-based interventions unless accompanied by structural support. By integrating insights across disciplines, this study contributes a comprehensive behavioural HRM framework that links individual cognition, organisational context, and financial outcomes. The findings offer clear implications for HR policy design and identify critical gaps for future research, particularly in emerging economies, longitudinal analysis, and welfare-based evaluation of behavioural interventions.

**Keywords:** Behavioural finance; Human resource management; Cognitive biases; Employee financial decisions; Choice architecture

*JEL Codes:* D91, G41, M12, J24

## INTRODUCTION

Human resource management increasingly operates in an environment where employee financial wellbeing, decision quality, and behavioural risk have direct implications for organisational performance. Yet much of traditional HR and finance theory continues to rely on assumptions of rational decision-making, stable preferences, and full information. Behavioural research challenges these assumptions by demonstrating that individuals systematically rely on heuristics and exhibit cognitive biases that affect financial choices in predictable ways (Kahneman & Tversky, 1979; Thaler, 1985).

Within organisations, these behavioural tendencies manifest in diverse contexts, ranging from retirement saving and benefit selection to incentive responses and managerial investment decisions. Employees frequently procrastinate, under-save, or remain passive in the face of complex benefit choices, even when employer-provided options are objectively beneficial (Madrian & Shea, 2001). Similarly, managers and professionals display overconfidence, optimism, and framing biases that influence capital allocation and risk-taking, often with long-term consequences for firm value (Malmendier & Tate, 2005).

The growing integration of behavioural finance into public policy has reshaped pension design, savings policy, and consumer protection. However, its application within HRM remains comparatively fragmented. Existing studies tend to focus either on micro-level employee behaviour or on managerial biases in corporate finance, with limited synthesis across levels of analysis. This fragmentation obscures the role of HRM as a strategic intermediary capable of shaping behavioural environments within firms.

The present study addresses this gap by systematically reviewing literature at the intersection of behavioural finance and HRM. Rather than treating cognitive biases as individual shortcomings, the study conceptualises them as predictable patterns that can be mitigated or exacerbated through HR policy design. By synthesising evidence across employee- and firm-level domains, the study seeks to reposition HRM as a behavioural lever central to organisational financial decision-making.

## OBJECTIVES AND BACKGROUND OF THE STUDY

The intellectual roots of behavioural finance lie in psychology-driven critiques of expected utility theory, which demonstrated that real decision-makers systematically deviate from rational benchmarks (Tversky & Kahneman, 1974). Over time, these insights have reshaped understanding of investor behaviour, market anomalies, and corporate decision-making. Parallel developments in HRM have highlighted the growing importance of employee financial wellbeing, engagement, and incentive alignment. Yet integration between these literatures remains uneven.

In workplace settings, employees are routinely required to make complex financial decisions e.g. retirement contributions, portfolio allocation, and participation in ownership schemes, often under conditions of limited attention, stress, and uncertainty. Evidence shows that financial literacy alone is insufficient to overcome behavioural frictions such as inertia and present bias (Fernandes et al., 2014). At the same time, firms increasingly rely on performance-linked pay, equity incentives, and profit-sharing arrangements that interact with behavioural biases in ways not fully anticipated by traditional agency models.

Against this backdrop, behavioural HRM has emerged as a promising framework that applies behavioural insights to policy design, communication, and incentives. However, much of the existing evidence remains context-specific, concentrated in developed economies, and focused on short-term outcomes. There is a need for integrative synthesis that clarifies what is known, where evidence is robust, and where significant gaps remain.

Accordingly, the objectives of the present study are fourfold. First, it seeks to synthesise core behavioural theories relevant to HR and firm-level financial decisions. Second, it reviews empirical evidence on

employee financial behaviour and managerial biases within organisational contexts. Third, it examines how HRM practices can mitigate or amplify behavioural distortions. Finally, it identifies methodological gaps and future research directions that can strengthen the behavioural HRM literature.

## **METHODOLOGY FOR THE STUDY**

This study employs a systematic literature review methodology, guided by PRISMA principles of transparency, replicability, and structured synthesis. The review focuses on peer-reviewed academic literature addressing behavioural finance concepts within HRM and organisational contexts.

### **Identification and Screening**

The reference list provided in the uploaded paper formed the primary corpus of analysis, ensuring conceptual coherence and relevance. Studies were screened based on their explicit focus on cognitive biases, behavioural decision-making, employee financial behaviour, or managerial finance within firms.

### **Eligibility Criteria**

Included studies comprised theoretical papers, empirical analyses, field experiments, and review articles published in reputable journals. Practitioner articles lacking empirical or theoretical grounding were excluded. No restriction was placed on methodology, allowing inclusion of experimental, archival, and qualitative studies.

### **Data Extraction and Classification**

Eligible studies were classified into thematic categories corresponding to the paper's Findings sections, including behavioural foundations, employee saving behaviour, financial literacy, ownership incentives, managerial biases, and contextual effects.

### **Synthesis**

Given heterogeneity in methods and outcomes, a narrative synthesis approach was adopted. This enabled integration of insights across disciplines while preserving contextual nuance. The review followed PRISMA logic in study identification, screening, eligibility, and synthesis stages.

## **FINDINGS OF THE STUDY**

### **Theoretical Foundations: Behavioural Models That Matter for HR & Firms**

Behavioural economics and behavioural finance provide a powerful foundation for understanding why employees and managers often deviate from the predictions of traditional rational-choice models in workplace financial decisions. Within the HR context, these behavioural models help explain persistent gaps between what employees should do e.g. saving adequately for retirement or diversifying financial risk and what they do in practice. The literature reviewed in this study draws heavily on a small set of core behavioural frameworks that have proved especially influential for analysing HR policies, employee financial behaviour, and firm-level outcomes.

At the centre of this literature is prospect theory, which challenges the assumption of stable, utility-maximising preferences under risk. Prospect theory demonstrates that individuals evaluate outcomes relative to reference points and exhibit loss aversion, meaning losses loom larger than equivalent gains (Kahneman & Tversky, 1979). In workplace settings, this helps explain employees' reluctance to alter default retirement contributions, reallocate portfolios, or accept changes to compensation structures, even

when such changes are objectively beneficial. Closely related work on myopic loss aversion further shows that frequent evaluation of outcomes can increase risk aversion, shaping how employees perceive equity exposure in retirement plans or employee ownership schemes (Benartzi & Thaler, 1995).

A second foundational pillar is the literature on heuristics and biases, which highlights how cognitive shortcuts systematically influence judgement and decision-making under uncertainty (Tversky & Kahneman, 1974). In HR and organisational contexts, heuristics such as availability, representativeness, and anchoring affect both employee and managerial choices. Employees may overweight recent market downturns when deciding contribution rates, while managers may anchor investment or compensation decisions to past benchmarks rather than forward-looking fundamentals. These biases are particularly relevant in complex benefit environments, where choice overload and limited attention reduce the likelihood of active, welfare-enhancing decisions (Iyengar & Kamenica, 2010).

Mental accounting provides a further behavioural lens with direct implications for HR policy design. Mental accounting theory suggests that individuals compartmentalise money into separate accounts based on labels, sources, or intended uses, rather than treating wealth as fully fungible (Thaler, 1985). In the workplace, employees often treat retirement savings, bonuses, wages, and employee ownership stakes as distinct mental categories. This explains why employer-matched retirement contributions or labelled savings programs can be more effective than equivalent increases in take-home pay, and why employees may underappreciate the long-term value of deferred compensation (Thaler & Benartzi, 2004).

Behavioural models also emphasise time inconsistency and present bias, which are especially salient in employee financial decisions. Present-biased preferences lead individuals to place disproportionate weight on immediate costs and benefits, resulting in procrastination and underinvestment in long-term goals such as retirement saving (Laibson, as discussed in Madrian & Shea, 2001). HR interventions such as automatic enrolment, default contribution rates, and commitment devices directly respond to this behavioural tendency by reducing the need for active choice and aligning present actions with future welfare (Madrian & Shea, 2001; Thaler & Benartzi, 2004). These models shift the focus of HR policy from information provision alone to the design of choice architecture.

Beyond employee-level decisions, behavioural foundations extend to managerial and professional biases that shape firm-level financial outcomes. Research in behavioural corporate finance documents how overconfidence and optimism among managers influence capital investment, acquisitions, and risk-taking (Malmendier & Tate, 2005, 2008). These insights have important HR implications, particularly for executive selection, appraisal, and incentive design. From this perspective, HR systems serve not only to motivate performance but also to mitigate the negative effects of biased managerial judgement through governance structures, monitoring, and incentive alignment (Ben-David et al., 2013; Jensen & Meckling, 1976).

Finally, behavioural models increasingly incorporate contextual and scarcity-based explanations of decision-making. Scarcity theory argues that financial stress and limited resources reduce cognitive bandwidth, leading to short-termism, errors, and reliance on heuristics (Mullainathan & Shafir, 2013). In organisational settings, financially stressed employees may delay enrolment in beneficial plans, rely on costly credit, or disengage from long-term saving opportunities. This perspective underscores the importance of HR policies that simplify decisions, reduce cognitive load, and address liquidity constraints alongside traditional benefits design.

Taken together, these behavioural foundations demonstrate why HR policies grounded solely in rational-choice assumptions often fall short. Prospect theory, heuristics and biases, mental accounting, present bias, and behavioural corporate finance models collectively explain how real employees and managers think and decide. The literature thus positions HRM not merely as an administrative function, but as a

behavioural lever through which firms can design environments that improve employee financial wellbeing and support more effective organisational decision-making.

### **Employee Financial Decisions: Retirement Saving, Defaults, and Commitment Devices**

A substantial portion of the behavioural HRM and behavioural finance literature focuses on employee financial decisions related to retirement saving, as these choices are consequential for long-term employee welfare and exhibit persistent deviations from rational economic predictions. Traditional models assume that employees actively optimise saving decisions based on preferences, income, and expected returns. However, empirical evidence overwhelmingly shows that many employees procrastinate, under-save, or fail to participate in beneficial retirement plans, even when such plans offer generous employer matching. This gap between optimal and observed behaviour has made retirement saving a central testing ground for behavioural models and HR interventions.

One of the most robust findings in this literature concerns the power of defaults. Research demonstrates that default options strongly influence employee participation and contribution rates in defined contribution retirement plans. Madrian and Shea (2001) show that automatic enrolment dramatically increases participation in 401(k) plans by shifting the default from non-participation to participation. Employees tend to follow the “path of least resistance,” remaining in default settings rather than making active changes. Subsequent studies confirm that default contribution rates and asset allocations shape not only enrolment but also long-term saving trajectories (Choi et al., 2002; Beshears et al., 2009). From an HR perspective, this evidence highlights that plan design choices are not neutral; they actively shape employee outcomes.

The effectiveness of defaults is closely linked to behavioural mechanisms such as inertia, status quo bias, and loss aversion. Employees often perceive opting out of a default as a potential loss, even when the default may not be optimal for their individual circumstances (Kahneman & Tversky, 1979). As a result, default contribution rates can anchor long-term behaviour. While low default rates raise participation, they may inadvertently signal that minimal saving is sufficient, leading to suboptimal contribution levels over time (Choi et al., 2006). More recent research therefore examines higher default contribution rates and auto-escalation features, finding that well-designed defaults can substantially improve retirement adequacy without reducing employee satisfaction (Beshears et al., 2023).

Beyond defaults, the literature highlights the role of commitment devices in addressing present bias and time inconsistency. Commitment-based programs allow employees to pre-commit future resources to saving, reducing the temptation to prioritise immediate consumption. The most influential example is the *Save More Tomorrow* program, which enables employees to commit a portion of future salary increases to retirement contributions (Thaler & Benartzi, 2004). Empirical evidence shows that such programs produce sustained increases in saving rates over time, as they align employees’ long-term intentions with automatic future actions. Importantly, these programs reduce the perceived short-term cost of saving, a key barrier identified in behavioural models.

The success of commitment devices reflects deeper behavioural insights about self-control and mental accounting. Employees often separate future income from current income in mental accounts, making it psychologically easier to allocate future raises to saving rather than current wages (Thaler, 1985). HR interventions that exploit this tendency achieve higher participation and persistence than those relying solely on information or financial education. Field evidence further suggests that commitment devices are especially effective when combined with default enrolment and automatic escalation, reinforcing saving behaviour through multiple behavioural channels (Thaler & Benartzi, 2009).

At the same time, the literature cautions against a one-size-fits-all approach. Research on heterogeneity in default responses shows that the impact of automatic enrolment and commitment devices varies across income groups, age cohorts, and levels of financial literacy (Goda et al., 2020; Lusardi & Mitchell, 2014). Lower-income or financially constrained employees may value liquidity more highly and may experience stress if default contribution rates are set too aggressively. This has led to a growing emphasis on adaptive plan design, where defaults are calibrated to employee characteristics and accompanied by clear communication and easy opt-out options (Bernheim, 2015).

Another important strand of research examines active choice and simplification as complements to defaults. While defaults are powerful, some studies suggest that requiring employees to make an explicit choice—rather than relying solely on passive enrolment—can also improve outcomes, particularly when choices are simplified and well-framed (Choi et al., 2016). Simplification reduces cognitive overload and helps employees focus on key parameters such as contribution rates, rather than navigating complex menus of funds and options (Iyengar & Kamenica, 2010). These findings reinforce the idea that employee financial decisions are shaped as much by decision environments as by preferences.

The literature on retirement saving, defaults, and commitment devices demonstrates that employee financial behaviour is highly sensitive to HR policy design. Defaults and commitment mechanisms consistently outperform traditional education-based approaches in increasing participation and savings, particularly when they are thoughtfully calibrated and ethically implemented. For firms, these interventions not only improve employee financial wellbeing but can also enhance engagement, reduce financial stress, and strengthen retention. The evidence thus positions HR departments as key architects of behavioural choice environments that shape long-term employee outcomes, rather than passive administrators of benefit plans.

## **FINANCIAL LITERACY, EDUCATION, AND WORKPLACE PROGRAMS**

Financial literacy and workplace-based financial education have long been viewed as natural solutions to suboptimal employee financial behaviour. The underlying assumption in early research was that employees make poor financial decisions primarily because they lack information or technical knowledge. From this perspective, improving financial literacy through seminars, counselling, or educational materials should lead to better saving, borrowing, and investment choices. However, the literature reviewed in this study presents a more nuanced and, at times, sobering assessment of the effectiveness of financial education when delivered in isolation.

Foundational studies on workplace financial education report that such programs can improve financial knowledge and awareness, particularly with respect to retirement planning concepts, compound interest, and risk diversification (Bernheim et al., 2001; Lusardi & Mitchell, 2011). Employees who participate in employer-sponsored education programs often demonstrate better understanding of plan features and express stronger intentions to save. Longitudinal evidence further suggests that exposure to financial education earlier in working life can have lasting effects on planning behaviour, even years after the intervention (Bernheim et al., 2001). These findings establish that education is not irrelevant; it plays a meaningful role in shaping cognitive capability.

Yet a consistent theme across more recent reviews and meta-analyses is that improvements in knowledge do not reliably translate into sustained behavioural change. Fernandes, Lynch, and Netemeyer (2014) show that while financial education increases knowledge, its impact on downstream financial behaviour is relatively modest and tends to decay over time. Similarly, large-scale reviews conclude that classroom-

style or information-heavy programs often struggle to overcome behavioural frictions such as procrastination, inertia, and present bias (Hastings et al., 2013; Kaiser et al., 2019). In workplace settings, employees may understand what they should do, yet still fail to act.

This gap between knowledge and action has led scholars to re-evaluate the role of financial literacy within behavioural models of decision-making. Behavioural economics suggests that limited attention, choice overload, and self-control problems constrain the effectiveness of purely educational interventions (Kahneman, 2011; DellaVigna, 2009). As a result, financial education is increasingly viewed as a necessary but insufficient condition for improving employee financial outcomes. Education builds capability, but behaviour is strongly shaped by context, incentives, and decision architecture.

In response, the literature documents a shift toward integrated workplace programs that combine education with behavioural design features. Studies show that education is more effective when paired with simplified choices, timely prompts, or default-based enrolment mechanisms (Choi et al., 2009; Madrian, 2014). For example, brief educational messages delivered at moments of decision—such as enrolment periods or pay raises—appear more impactful than generic training sessions delivered far in advance (Hastings & Mitchell, 2020). This timing effect reflects behavioural insights about salience and limited cognitive bandwidth.

Another important development is the move away from extensive classroom instruction toward light-touch, scalable interventions. Field experiments demonstrate that short communications, reminders, and prompts e.g. text messages encouraging plan enrolment or contribution increases, can produce measurable behavioural effects at low cost (Karlan et al., 2016). These interventions do not aim to transform financial knowledge comprehensively, but rather to nudge behaviour by bringing desired actions to the top of employees' minds. Evidence suggests that such approaches often outperform traditional education in driving actual take-up and persistence (Kaiser et al., 2019).

Workplace programs have also expanded to address financial stress and debt management, recognising that saving behaviour cannot be separated from employees' broader financial circumstances. Research shows that financially stressed employees face reduced cognitive capacity and are more likely to rely on high-cost borrowing, which in turn undermines engagement with long-term saving plans (Mullainathan & Shafir, 2013; Lusardi & Tufano, 2015). Employer-provided counselling, debt management tools, and emergency savings programs have therefore emerged as complements to retirement-focused education. While evidence in this area is still developing, early findings suggest that addressing short-term financial strain can improve participation in longer-term programs (Sykes & Vesty, 2018).

Importantly, the literature highlights substantial heterogeneity in program effectiveness. Financial literacy interventions tend to benefit higher-income and more educated employees more than financially vulnerable groups, potentially widening inequalities if not carefully designed (Lusardi & Mitchell, 2014). This has led to calls for targeted and adaptive workplace programs that recognise differences in income, literacy, and financial needs, rather than assuming uniform employee responses.

Evidence suggests that workplace financial education is most effective when embedded within a broader behavioural HR strategy. Education enhances understanding, but meaningful and sustained behavioural change is more likely when programs also simplify decisions, reduce cognitive burden, and align with employees financial realities. The literature thus reframes financial literacy not as a standalone solution, but as one component of an integrated approach to improving employee financial wellbeing and organisational outcomes.

### **Ownership, Incentives, and Behavioural Responses (ESOPs, Profit-Sharing)**

Employee ownership and incentive-based compensation schemes e.g. Employee Stock Ownership Plans (ESOPs), stock options, and profit-sharing arrangements, occupy a distinctive position at the intersection of human resource management, behavioural economics, and corporate finance. In principle, these mechanisms are designed to align employee interests with firm performance, enhance motivation, and promote long-term value creation. However, the literature reviewed in this study shows that actual employee responses to ownership and incentive schemes are shaped as much by behavioural factors as by financial logic, resulting in outcomes that are often more complex and context-dependent than standard agency theory would predict.

From a traditional economic perspective, employee ownership and profit-sharing are justified through incentive alignment. By linking a portion of employee compensation to firm performance, these schemes are expected to reduce agency problems, increase effort, and foster a sense of shared purpose (Jensen & Meckling, 1976). Empirical studies provide some support for this view, reporting positive associations between broad-based ownership, employee engagement, and firm performance under certain conditions (Blasi et al., 2018; Kruse, 2016). However, behavioural research suggests that the effectiveness of such incentives depends critically on how employees perceive, understand, and mentally process ownership stakes.

One influential behavioural explanation draws on mental accounting. Employees often treat ownership-based compensation differently from regular wages, mentally categorising ESOP holdings, stock options, or profit-sharing payouts as long-term or “extra” income rather than as part of overall wealth (Thaler, 1985). This mental separation can enhance the motivational impact of ownership schemes by increasing their salience and symbolic value. At the same time, it can lead employees to under-diversify their personal portfolios by holding excessive firm-specific risk, particularly when employer stock is framed as a reward or sign of trust rather than a financial asset requiring prudent management (Benartzi & Thaler, 1995).

Behavioural responses to ownership schemes are also shaped by status quo bias and inertia. Once employees are enrolled in ESOPs or profit-sharing plans, they tend to remain invested, even when portfolio rebalancing or diversification would be financially advisable. This tendency is reinforced by limited financial literacy and by the perceived complexity of exit or reallocation decisions (Agnew et al., 2003). While inertia can support long-term ownership and stability, it also raises concerns about excessive exposure to firm-specific risk, especially during periods of organisational or market stress.

The literature further highlights the role of salience and framing in shaping employee reactions. Ownership schemes that are communicated as participatory and inclusive, emphasising shared success and collective contribution, tend to elicit stronger engagement and identification with the firm (Blasi et al., 2013). Contrastingly, schemes that are poorly explained or framed purely in technical financial terms may fail to generate meaningful behavioural responses. Experimental and field evidence suggests that even small changes in communication e.g. highlighting historical payouts or linking ownership to concrete organisational outcomes, can significantly influence employee perceptions and participation (NCEO, 2021).

Profit-sharing arrangements introduce additional behavioural dynamics. Unlike ESOPs, profit-sharing payouts are often more immediate and tangible, which can enhance their motivational impact due to present-biased preferences. Employees are more likely to value rewards that are timely and easily understood, even if their expected long-term value is lower than that of deferred equity compensation (DellaVigna, 2009). However, this immediacy can also weaken the intended long-term alignment effect, as employees may treat profit-sharing bonuses as windfall income rather than as signals of sustained organisational performance.

The literature also points to important distributional and governance considerations. Behavioural responses to ownership schemes vary across income levels, job roles, and financial literacy. Lower-income employees may place greater weight on short-term liquidity and perceive ownership-based compensation as risky or inaccessible, while higher-income or managerial employees may be better positioned to benefit from equity participation (Lusardi & Mitchell, 2014). Governance context further moderates outcomes. Strong protections, diversification options, and transparent communication reduce the risk which employee ownership exposes workers to undue financial vulnerability (Blasi et al., 2016; Foulkes, 2019). At the managerial level, behavioural corporate finance research highlights how overconfidence and optimism interact with incentive design. Equity-based incentives may amplify risk-taking tendencies among overconfident managers, leading to aggressive investment or acquisition decisions that do not always enhance firm value (Malmendier & Tate, 2005, 2008). This creates an HR challenge in balancing motivational benefits against the potential for distorted decision-making. The literature therefore emphasises the importance of complementary governance mechanisms e.g. board oversight and performance-contingent vesting, to mitigate behavioural excesses (Ben-David et al., 2013). The evidence reviewed suggests that employee ownership and incentive schemes are neither inherently beneficial nor inherently risky. Their impact depends on behavioural responses shaped by mental accounting, framing, inertia, financial literacy, and organisational context. When thoughtfully designed and communicated, ESOPs and profit-sharing can strengthen engagement, retention, and shared value creation. When poorly designed, they may expose employees to concentrated risk or fail to generate meaningful behavioural change. The literature thus positions ownership-based incentives as powerful but delicate HR tools, whose effectiveness hinges on integrating behavioural insights into policy design and implementation.

### **Managerial and Professional Biases That Shape Firm-Level Financial Choices**

While much of the behavioural HRM literature focuses on employees' personal financial decisions, an equally important stream of research examines how managerial and professional cognitive biases shape firm-level financial choices. These biases influence capital allocation, financing decisions, risk-taking, and governance outcomes, thereby affecting firm performance and long-term value creation. From an HR perspective, this literature is particularly relevant because recruitment, appraisal, incentive design, and leadership development systems determine who occupies decision-making roles and how behavioural tendencies are amplified or constrained within organisations.

One of the most extensively studied managerial biases is overconfidence. Behavioural corporate finance research demonstrates that overconfident managers systematically overestimate their ability to generate returns and underestimate risks. Empirical evidence shows that such managers are more likely to overinvest, pursue value-destroying acquisitions, and rely excessively on internal financing, even when external capital would be more efficient (Malmendier & Tate, 2005; Ben-David et al., 2013). Overconfidence is not merely a psychological curiosity; it has measurable consequences for corporate policies and market valuation. From an HR standpoint, this raises important questions about executive selection and promotion processes that may inadvertently reward confidence and assertiveness without adequately screening for judgment accuracy.

Closely related to overconfidence is managerial optimism, which reflects a systematic bias toward positive expectations about future outcomes. Optimistic managers tend to delay loss recognition, adopt aggressive growth forecasts, and exhibit higher tolerance for financial risk (Heaton, 2002; Kahneman & Lovallo, 1993). While optimism can support entrepreneurial initiative and strategic boldness, excessive optimism increases the likelihood of financial distress when expectations are not realised. The literature suggests

that incentive systems tied too closely to short-term performance may exacerbate optimistic bias, encouraging managers to double down on failing projects rather than reassess strategies objectively (Bebchuk & Fried, 2004).

Another important behavioural influence arises from risk perception and framing effects. Even when managers possess similar information, the way financial choices are framed—as potential gains or losses, can alter strategic decisions. Prospect theory predicts that decision-makers become risk-seeking in the domain of losses and risk-averse in the domain of gains (Kahneman & Tversky, 1979). Applied to corporate settings, this implies that managers facing declining performance may engage in excessive risk-taking to “recover” losses, a pattern observed in distressed firms and financial institutions (Fahlenbrach & Stulz, 2011). HR governance mechanisms, such as performance reviews and board oversight, play a crucial role in moderating these tendencies.

Beyond top executives, professional biases among finance managers, analysts, and advisors also shape organisational outcomes. Research on expert decision-making shows that even highly trained professionals are susceptible to anchoring, confirmation bias, and groupthink, particularly in high-pressure or uncertain environments (Berthet et al., 2022). Financial professionals may anchor forecasts to historical benchmarks or consensus estimates, limiting strategic flexibility. Within firms, these biases can be reinforced by hierarchical cultures that discourage dissent, highlighting the importance of HR practices that promote psychological safety and diverse viewpoints.

The literature further emphasises interaction effects between incentives and biases. Equity-based compensation and performance-linked pay are intended to align managerial interests with shareholder value, yet behavioural evidence shows that such incentives can magnify existing biases. For instance, stock options may encourage overconfident managers to pursue high-variance strategies that increase upside potential but expose firms to downside risk (Malmendier & Tate, 2008). This creates a paradox for HRM: the same incentive mechanisms designed to motivate value creation can, under certain behavioural conditions, undermine it.

Behavioural research also highlights the role of social and organisational context in shaping managerial biases. Norms, peer comparisons, and internal competition influence decision-making in ways not captured by traditional agency models. Managers may imitate peers’ investment strategies or compensation structures to avoid reputational risk, even when such strategies are not optimal for their firm (Della Vigna, 2009). HR systems that emphasise relative performance rankings can intensify these effects, reinforcing conformity rather than encouraging independent judgment.

Interestingly, the literature does not view managerial biases as immutable. Instead, it points to HR and governance interventions that can mitigate their impact. Structured decision protocols, diverse leadership teams, independent board oversight, and performance evaluation systems that reward long-term outcomes can reduce the influence of overconfidence and optimism (Ben-David et al., 2013; Jensen & Meckling, 1976). Training programs that raise awareness of cognitive biases among managers and professionals have also shown promise, particularly when combined with institutional checks and balances rather than relying solely on self-correction (Berthet et al., 2022).

The literature on managerial and professional biases underscores that firm-level financial choices are shaped not only by information and incentives, but also by systematic psychological tendencies. Overconfidence, optimism, framing effects, and professional heuristics influence strategic investment, risk-taking, and governance outcomes in ways that directly affect firm performance. For HRM, these insights reposition the function as a central actor in shaping financial decision quality, through selection, incentives, training, and governance, rather than a peripheral administrative support. Integrating

behavioural awareness into HR policies thus emerges as a critical pathway for improving organisational financial outcomes.

### **Contextual and Scarcity Effects: How Employee Circumstances Shape Choices**

An important strand of behavioural research highlights that employee financial decisions cannot be understood in isolation from the broader contexts in which those decisions are made. Traditional economic models tend to treat preferences as stable and independent of circumstances, yet behavioural evidence consistently shows that context, stress, and scarcity fundamentally shape how individuals process information and make choices. In workplace settings, employees' income levels, financial security, job stability, and day-to-day stressors significantly influence their ability to engage with HR-provided financial options, even when those options are objectively beneficial.

Central to this perspective is scarcity theory, which argues that having too little, whether money, time, or cognitive resources, captures attention and reduces mental bandwidth (Mullainathan & Shafir, 2013). When individuals are preoccupied with pressing financial concerns, such as meeting basic expenses or managing debt, they have fewer cognitive resources available for long-term planning. In organisational contexts, this manifests in low participation in retirement plans, delayed enrolment in benefits, and reliance on short-term coping mechanisms rather than forward-looking financial decisions (Mani et al., 2013). Importantly, these outcomes are not the result of poor preferences or lack of motivation, but of constrained cognitive capacity under stress.

Empirical studies demonstrate that financial stress impairs decision quality in systematic ways. Employees facing liquidity constraints are more likely to procrastinate, default to inaction, or rely on heuristics that prioritise immediate relief over long-term gain (Haushofer & Fehr, 2014). For example, financially strained employees may avoid increasing retirement contributions, even when employer matching is available, because the immediate reduction in take-home pay feels too costly. Behavioural research shows that such short-termism is amplified by present bias and loss aversion, which become more pronounced under conditions of scarcity (Kahneman & Tversky, 1979; Mullainathan & Shafir, 2013).

The literature also highlights how workplace pay structures and timing interact with scarcity effects. Employees paid at longer intervals or with volatile income streams often experience greater financial strain, which in turn affects engagement with benefits and savings programs. Studies examining payday lending and short-term credit use show that employees under financial pressure are more likely to resort to high-cost borrowing, which exacerbates stress and further reduces cognitive bandwidth (Gathergood & Weber, 2018; Sykes & Vesty, 2018). These findings suggest that HR policies related to pay frequency, emergency liquidity, and income smoothing can have meaningful downstream effects on employee financial behaviour.

Contextual effects are also evident in how choice environments are experienced by different employee groups. Complex benefit menus, while offering flexibility, can overwhelm employees with limited time or cognitive resources. Research on choice overload demonstrates that too many options reduce participation and satisfaction, particularly among individuals facing stress or low financial literacy (Iyengar & Kamenica, 2010). In such contexts, simplification and guided choice are not merely convenience features, but equity-enhancing interventions that help vulnerable employees access beneficial programs.

Importantly, scarcity effects interact with heterogeneity in employee circumstances. Lower-income employees, younger workers, and those with unstable employment histories tend to experience higher levels of financial stress and are therefore more sensitive to contextual barriers (Lusardi & Mitchell, 2014). Uniform HR interventions may inadvertently benefit higher-income or financially secure employees while

leaving others behind. This insight has led researchers to emphasise the importance of adaptive and segmented HR strategies that recognise differences in employee needs and constraints.

The literature also points to positive contextual interventions that mitigate scarcity-related barriers. Providing emergency savings options, employer-sponsored financial counselling, or access to low-cost credit alternatives can reduce immediate financial pressure and free up cognitive resources for longer-term planning (Karlán & Mullainathan, 2018). Similarly, interventions that align benefit decisions with moments of reduced stress—such as enrolment at pay raises rather than during periods of financial strain, have been shown to improve participation and follow-through (Thaler & Benartzi, 2004).

From a broader HRM perspective, these findings challenge the assumption that non-participation in benefits reflects apathy or irresponsibility. Instead, the literature frames such behaviour as a rational response to constrained circumstances. HR systems that ignore scarcity effects risk misdiagnosing the problem and over-relying on education or incentives that fail to address underlying constraints. Conversely, HR policies that reduce friction, simplify choices, and provide short-term financial support can meaningfully improve employee outcomes without altering preferences or increasing compensation. The literature on contextual and scarcity effects underscores that employee financial decisions are deeply embedded in lived realities. Financial stress, liquidity constraints, and cognitive load shape how employees engage with workplace benefits and incentives. Recognising these factors shifts the role of HR from merely offering choices to designing supportive environments that account for human limitations. By addressing scarcity and context directly, firms can improve employee financial wellbeing while also enhancing engagement, productivity, and retention.

### **HRM as a Lever: Integrating Behavioural Insights into Policy and Practice**

The growing convergence of behavioural economics and human resource management (HRM) has repositioned HR functions from administrative support units to active designers of decision environments within firms. The literature reviewed in this study consistently argues that HRM can serve as a powerful behavioural lever, shaping employee and managerial choices not by coercion or heavy-handed incentives, but through thoughtful integration of behavioural insights into everyday policies and practices. This perspective recognises that how choices are structured often matters as much as, if not more than, the choices themselves.

A central behavioural tool available to HRM is choice architecture, which refers to the way options are presented, framed, and sequenced. Research demonstrates that defaults, simplification, and framing can significantly influence employee behaviour in areas such as retirement saving, benefit selection, and participation in ownership schemes (Thaler & Sunstein, 2008; Madrian, 2014). HR policies that incorporate automatic enrolment, pre-set contribution rates, or simplified menus reduce reliance on active decision-making, thereby overcoming inertia and procrastination. Importantly, the literature emphasises that these interventions preserve freedom of choice while nudging employees toward welfare-enhancing outcomes.

Another key contribution of behavioural HRM lies in addressing present bias and self-control problems. Employees often intend to make prudent financial decisions in the future but struggle to act in the present. HR practices such as commitment devices, automatic escalation of savings, and deferred-choice mechanisms align present actions with long-term preferences (Thaler & Benartzi, 2004). By embedding these mechanisms into compensation and benefits systems, HRM helps employees translate intentions into sustained behaviour without requiring constant willpower or monitoring.

The literature also highlights the importance of salience and timing in HR communication. Behavioural research shows that information is most effective when delivered at moments of decision relevance, rather

than through generic or infrequent training sessions (Karlan et al., 2016). HR units that strategically time reminders and prompts during pay raises, enrolment windows, or life events, achieve greater behavioural impact than those relying on broad awareness campaigns. This insight has led to a shift from information-heavy approaches toward concise, targeted communications that respect employees' limited attention. Beyond employee benefits, behavioural insights are increasingly applied to performance management and incentives. Traditional incentive systems assume linear and predictable responses to rewards, yet behavioural evidence suggests that incentives interact with biases such as overconfidence, loss aversion, and social comparison. HRM can mitigate unintended consequences by designing balanced scorecards, longer evaluation horizons, and peer benchmarks that discourage excessive risk-taking or short-termism (Ben-David et al., 2013). In this sense, HRM acts as a governance mechanism that tempers behavioural distortions rather than amplifying them.

A recurring theme in the literature is the value of segmentation and heterogeneity-aware design. Employees differ widely in income, financial literacy, risk tolerance, and cognitive load. Behaviourally informed HR practices recognise these differences and avoid one-size-fits-all solutions. Adaptive defaults, opt-in flexibility, and tiered communication strategies help ensure that interventions support financially vulnerable employees without constraining those who prefer more active control (Lusardi & Mitchell, 2014). This approach enhances both effectiveness and perceived fairness.

The literature further stresses the role of measurement and experimentation in behavioural HRM. Unlike traditional policies that are rolled out uniformly, behavioural interventions benefit from iterative testing using administrative data, A/B experiments, and pilot programs (Madrian, 2014). HR departments that adopt experimental mindsets can identify heterogeneous treatment effects, refine interventions, and scale those that demonstrably improve outcomes. This evidence-based orientation strengthens the credibility of HRM within organisations and aligns it more closely with strategic decision-making.

Importantly, scholars caution against viewing behavioural HRM as a substitute for fair compensation or supportive working conditions. Behavioural tools are most effective when embedded within ethically grounded policies that respect employee autonomy and address structural constraints such as financial stress and job insecurity (Mullainathan & Shafir, 2013). When used responsibly, behavioural insights complement, not replace, traditional HR investments in pay, development, and wellbeing.

The literature positions HRM as a central mechanism through which behavioural insights can be translated into organisational practice. By redesigning choice environments, aligning incentives with human psychology, and embracing experimentation, HRM can improve employee financial wellbeing, decision quality, and engagement. This behavioural turn expands the strategic relevance of HRM, highlighting its role not merely in managing people, but in shaping how decisions are made across the firm.

#### **IDENTIFIED RESEARCH GAPS AND FUTURE SCOPE OF STUDY**

The literature at the intersection of behavioural finance and human resource management (HRM) has grown rapidly over the past two decades, particularly in areas related to employee financial decisions, retirement saving, managerial biases, and incentive design. While this body of work has generated influential insights and strong policy relevance, a closer examination reveals important methodological patterns, limitations, and unresolved gaps. Understanding these issues is essential for interpreting existing findings and for guiding future research toward more robust and generalisable conclusions.

A major methodological strength of this literature is the extensive use of randomised controlled trials (RCTs) and large-scale field experiments, especially in the context of retirement saving and benefit design. Studies on automatic enrolment, default contribution rates, and commitment devices frequently rely on administrative data from employers and pension providers, allowing researchers to observe actual

behaviour rather than self-reported intentions (Madrian & Shea, 2001; Thaler & Benartzi, 2004; Choi et al., 2016). These designs provide strong internal validity and have been instrumental in establishing causal relationships between choice architecture and employee behaviour. However, this methodological strength is also a source of imbalance, as experimental evidence is heavily concentrated in a narrow set of institutional settings.

One clear gap is identified regarding contextual concentration, particularly the dominance of studies conducted in large organisations and in developed economies, most notably the United States. Retirement-focused research overwhelmingly draws on 401(k)-type plans, which limits the external validity of findings for countries with different pension systems, labour market institutions, or cultural norms around saving and risk (Lusardi & Mitchell, 2014). Small firms, informal employment settings, and emerging economies remain underrepresented, even though behavioural constraints and financial vulnerability may be more pronounced in these contexts. This geographic and institutional concentration raises questions about the generalisability of best practice behavioural interventions across diverse labour markets.

Another methodological limitation lies in the outcome measures commonly employed. Many studies focus on proximal behavioural outcomes such as enrolment rates, contribution levels, or short-term portfolio allocations. While these measures are policy-relevant and relatively easy to observe, they provide limited insight into long-term welfare, financial security, or organisational outcomes. Far fewer studies track downstream effects such as retirement adequacy, debt accumulation, employee wellbeing, productivity, or retention over extended periods (Bernheim, 2015). As a result, the literature often demonstrates that behavioural interventions work in the short run without fully establishing whether they improve overall welfare or reduce inequality in the long run.

The literature also faces challenges related to heterogeneity and distributional effects. Many empirical studies report average treatment effects, which can obscure substantial variation across income levels, education, gender, and financial literacy. Evidence increasingly suggests that behavioural interventions do not affect all employees equally; defaults and nudges may disproportionately benefit higher-income or more financially stable workers, while financially constrained employees may opt out or remain unaffected (Goda et al., 2020; Lusardi & Mitchell, 2014). Methodologically, few studies are designed with sufficient power or segmentation to rigorously examine heterogeneous treatment effects, leading to an incomplete understanding of who benefits most from behavioural HR interventions and who may be left behind.

A further gap relates to interaction effects between interventions. Much of the literature evaluates single mechanisms in isolation—such as defaults, reminders, or education, despite the reality that employees are often exposed to multiple interventions simultaneously. Theoretical models suggest that behavioural biases interact in complex ways, yet empirical designs rarely test how combinations of education, commitment devices, liquidity support, and incentives jointly influence behaviour (DellaVigna, 2009). This limits the ability to design integrated HR policies that reflect the multifaceted nature of employee decision-making.

Methodological concerns are also evident in studies of managerial and professional biases. While behavioural corporate finance has produced compelling evidence linking overconfidence and optimism to firm-level decisions, many studies rely on indirect proxies such as option exercise behaviour, press portrayals, or forecast errors (Malmendier & Tate, 2005; Ben-David et al., 2013). These proxies, while innovative, raise questions about construct validity and measurement error. Moreover, causal inference remains challenging, as biased managers may self-select into certain firms or roles, making it difficult to disentangle individual traits from organisational context.

Another notable gap concerns the limited integration of HRM and behavioural finance methods. Employee-focused studies tend to rely on micro-level experimental designs, while managerial bias

research often uses archival corporate data and econometric modelling. Few studies bridge these approaches by examining how HR systems e.g. selection, training, and appraisal—moderate the behavioural tendencies of managers and professionals. This separation restricts the development of a unified behavioural HRM framework that spans employee and executive decision-making.

The literature also exhibits temporal limitations. Many studies capture behaviour over relatively short windows, often constrained by data availability or organisational access. Behavioural effects such as inertia and habit formation may persist for years, yet long-run follow-up is rare. Similarly, few studies examine how behavioural responses evolve as employees gain experience, financial literacy, or face life events such as job changes or economic shocks (Hastings & Mitchell, 2020). Without longer time horizons, it is difficult to assess the durability and adaptability of behavioural interventions.

Ethical and normative considerations represent another underexplored methodological dimension. While behavioural interventions are often justified on welfare grounds, relatively few studies explicitly examine employee perceptions of fairness, autonomy, or trust in employer-designed choice architectures (Thaler & Sunstein, 2008). The absence of qualitative or mixed method approaches limits understanding of how behavioural HR practices are experienced by employees, particularly those who are financially vulnerable or sceptical of managerial motives.

Finally, there is a growing recognition of the need for methodological pluralism. Heavy reliance on quantitative methods, while valuable, risks overlooking contextual nuance and lived experience. Qualitative interviews, case studies, and ethnographic approaches remain rare in this literature, despite their potential to illuminate how behavioural interventions interact with organisational culture, power relations, and employee trust. Integrating such methods could enrich theoretical development and improve the design of context-sensitive HR policies.

The behavioural HRM literature is methodologically strong in its use of experiments and administrative data, but uneven in scope, context, and depth. Key gaps include over-concentration in specific institutional settings, limited long-term and welfare-focused outcomes, insufficient attention to heterogeneity and interaction effects, and weak integration between employee- and manager-level analyses. Addressing these methodological limitations will require broader geographic coverage, longer time horizons, richer data, and greater methodological diversity. Such advances are essential for moving the field beyond proof-of-concept findings toward a more comprehensive and inclusive understanding of how behavioural insights can be effectively embedded in HRM practice.

## CONTRIBUTIONS OF THE STUDY

This study makes several significant contributions to the literature on behavioural finance and HRM. First, it provides an integrated synthesis of employee-level and firm-level behavioural research, bridging a gap between micro behavioural studies and corporate finance literature. Second, it reconceptualises HRM as a behavioural governance mechanism, capable of shaping financial decision environments rather than merely administering policies. Third, the study highlights the limits of financial literacy-only approaches, demonstrating that behavioural frictions persist even among informed employees. Fourth, it advances understanding of contextual and scarcity effects, reframing suboptimal behaviour because of constrained circumstances rather than poor preferences. Finally, the study contributes methodologically by identifying gaps related to external validity, long-term welfare outcomes, and integration across levels of analysis, thereby offering a clear agenda for future research.

## CONCLUSION

This systematic review demonstrates that financial decision-making within firms is deeply behavioural in nature. Employees and managers alike are influenced by cognitive biases, contextual constraints, and choice architecture. HRM plays a critical role in shaping these environments and therefore holds substantial potential to improve decision quality and financial outcomes.

The evidence reviewed suggests that behaviourally informed HR policies e.g. defaults, commitment devices, simplification, and adaptive design, consistently outperform traditional education-based approaches. At the same time, managerial biases underscore the need for governance-oriented HR systems that balance incentives with behavioural safeguards.

Integrating behavioural finance into HRM offers a powerful pathway for enhancing employee wellbeing and organisational performance. Future research grounded in diverse contexts, longer horizons, and richer data will be essential for realising this potential fully.

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