DOI: https://doi.org/10.4038/jhrmp.v11i4.81

From Training to Service-Quality Behavior: The Moderating Role of Employee Engagement in Frontline Banking

D. I. V. Senadhira
Faculty of Graduate Studies, University of Colombo, Sri Lanka

Abstract: Commercial banks operate in competitive and customer-driven environments where frontline employees shape service-quality perceptions during daily interactions. Despite substantial investments in competency building in terms of employee training, many banks continue to face complaints relating to responsiveness, communication, complaint handling, and service consistency. This study examines the relationship between competency building in terms of training and service-quality behavior among frontline employees in commercial banking and investigates the moderating role of employee engagement. Drawing on Human Capital Theory, the Job Demands-Resources model, and Social Exchange Theory, the study adopted a longitudinal survey design involving frontline employees of a leading commercial bank in Sri Lanka. Data were initially collected from 150 frontline employees using pre-training and post-training surveys. A two-day specially designed competency-building intervention was developed using Subject Matter Expert input and evaluated through pre-training and post-training surveys administered one month apart, consistent with Kirkpatrick's learning and behavioral evaluation perspectives. Competency building was operationalized through product knowledge, multitasking, problem solving, timeliness in serving, social etiquette, and personal appearance. Employee engagement was measured using the Utrecht Work Engagement Scale (17), while service-quality behavior was measured using an adapted SERVQUAL-based behavioral instrument supported by critical incident scenarios reflecting actual banking situations. SPSS was used for descriptive statistics and paired sample t-tests, while SmartPLS was used for PLS-SEM analysis. The findings revealed that product knowledge, multitasking, problem solving, and social etiquette significantly influenced service-quality behavior. Employee engagement strengthened several competency-behavior relationships, particularly those involving product knowledge, problem solving, timeliness, and social etiquette. The study contributes to training-transfer, engagement, and service-quality literature by showing that competency development alone is insufficient unless employees are psychologically engaged to apply acquired competencies in demanding service environments.

Keywords: *Commercial Banking, Competency Building, Employee Engagement, Service-quality Behavior, Training Effectiveness*

Background of the Study

Commercial banking operates in an environment where service quality, operational reliability, customer confidence, and relationship continuity are essential for sustainable competitiveness. Products, interest rates, digital platforms, and transaction processes can often be imitated by competitors, but the quality of frontline customer interaction remains a more sustainable source of service differentiation and competitive advantage (Bakker & Demerouti, 2017; Karatepe et al., 2020). For this reason, frontline service behavior has become a strategic differentiator in banking.

Customers often judge a bank not only by the financial product received, but also by the clarity of explanation, courtesy, speed, empathy, and problem-solving support experienced during service encounters. Account opening, fixed-deposit withdrawals, complaint handling, account

inquiries, cheque transactions, digital-banking assistance, and service recovery episodes all create moments in which customers form judgments about the bank's professionalism and reliability.

The operational importance of frontline employees has encouraged commercial banks to invest heavily in competency-building initiatives which consist of training. These investments are generally justified on the assumption that employees who acquire stronger knowledge, skills, and behavioral competencies contribute to improved service delivery, productivity, and organizational performance (Becker, 1993; Aguinis & Kraiger, 2009). Human Capital Theory supports this assumption by treating employee knowledge and capability as productive assets that can improve organizational outcomes when developed appropriately. In banking, this logic is especially relevant because employees directly handle customer concerns, regulatory documentation, transaction processes, and service failures. However, training expenditure does not automatically guarantee behavioral transfer in workplace settings because acquired competencies are often influenced by work climate, motivation, supervisory support, and operational pressures (Blume et al., 2019; Grossman & Salas, 2011).

Commercial banks also carry substantial human-resource-related costs. In many banking institutions, remuneration, employee benefits, development expenditure, welfare, and other human-capital-related costs form one of the largest categories of operating overheads. In Sri Lankan commercial banking, such expenditure runs into billions of rupees based on the size of branch networks and the labor-intensive nature of customer-service operations. Therefore, training and engagement investments require stronger justification through measurable improvements in productivity, customer experience, behavioral performance, and service quality. Globally, workforce studies by organizations such as Gallup and Deloitte continue to emphasize the strategic importance of capability building, engagement, and employee experience for organizational performance. The present study is positioned within this practical concern by examining whether competency-building investments are reflected in service-quality behavior.

Despite continued investment in employee development, many banks still experience complaints relating to poor responsiveness, inadequate explanations, delays, inconsistent customer handling, and weak service recovery. This suggests a gap between competency acquisition and behavioral transfer. Employees may learn in a training room but fail to apply what they have learned when they return to demanding branch environments. Queue pressure, emotional customers, system delays, compliance checks, workload intensity, and competing tasks can weaken the behavioral application of competencies. Accordingly, contemporary training-transfer literature increasingly argues that training effectiveness must be judged not only by learning outcomes, but also by whether learned competencies are enacted in actual workplace behavior.

Employee engagement provides an important explanation for this gap. Engagement reflects a positive work-related psychological state characterized by energy, dedication, and absorption. Engaged employees are more likely to persist under pressure, remain attentive to customer needs, invest discretionary effort, and apply acquired knowledge with greater commitment (Saks, 2006; Bakker & Albrecht, 2018).

Two employees may receive the same training, yet differ substantially in competency gained and how consistently they apply that competence during real

customer interactions. This makes engagement a potentially important moderator of the competency-building and service-quality behavior relationship.

Existing literature has examined training effectiveness, engagement, and service quality extensively, but many studies treat them separately. Limited empirical attention has been given to the integrated triad of competency building, employee engagement, and service-quality behavior, particularly in Sri Lankan commercial banking. The present study addresses this gap by evaluating a specially designed competency-building intervention and by examining whether employee engagement strengthens the transfer of competencies into frontline service-quality behavior. The study is also relevant to human-resource professionals because it links training evaluation with behavioral outcomes and provides evidence for improving the return on human-capital investments.

Literature Review

This section reviews the major literature streams supporting the study namely competency building, training effectiveness and service-quality behavior in frontline banking. It further reviews employee engagement, knowledge transfer, and the research gap addressed by the present study.

Competency Building and Training Effectiveness

Competency building refers to systematic efforts to develop employee knowledge, skills, attitudes, and behavioral capabilities required for effective workplace performance. In service organizations, competency building is not limited to technical knowledge but also includes interpersonal communication, emotional control, problem solving, time management, and the ability to perform under pressure. Human Capital Theory provides the theoretical foundation for competency-building investments by arguing that training and development enhance the productive capacity of employees. When organizations invest in employee knowledge and capability, they expect improved performance, higher productivity, and better service outcomes.

Training literature confirms that development interventions can produce individual and organizational benefits when they are strategically aligned with workplace requirements. Aguinis and Kraiger (2009) observed that training can benefit employees, teams, organizations, and society. Later research emphasized that training effectiveness depends not only on content quality, but also on learner motivation, work climate, supervisory support, and opportunities to apply learning. Hence effective competency building requires more than delivering information. It requires careful identification of operational gaps, design of relevant learning experiences, and evaluation of behavioral transfer after employees return to work.

In commercial banking, competency building is particularly important because frontline employees handle transactions, customer inquiries, complaints, documentation requirements, regulatory compliance, and service recovery. Product knowledge enables employees to explain banking products, charges, procedures, and documentation requirements accurately. Multitasking enables them to manage simultaneous demands such as queues, system navigation, customer questions, and transaction processing. Problem solving supports complaint handling and service recovery. Timeliness in serving supports responsiveness and efficiency.

Social etiquette supports respectful and empathetic interaction. Personal appearance supports visible professionalism and organizational image.

However, training effectiveness research repeatedly shows that improved learning does not always result in workplace transfer. Employees may demonstrate improved knowledge immediately after training but may not consistently apply it in real work settings. Training Transfer depends on conditions such as work pressure, motivation, managerial support, task relevance, opportunity to perform, and employee psychological readiness (Baldwin & Ford, 1988; Grossman & Salas, 2011). This distinction is critical for banks because training expenditure becomes meaningful only when it improves service behavior experienced by customers. Accordingly, the present study focuses not merely on competency acquisition but on the behavioral translation of competencies into service-quality behavior.

Service-Quality Behavior in Frontline Banking

Service quality is a central concern in banking because customer loyalty and trust are influenced by both transaction outcomes and service delivery behavior. The SERVQUAL framework identifies reliability, responsiveness, assurance, empathy, and tangibility as important dimensions of service quality. Although SERVQUAL was originally developed to measure customer perceptions, its dimensions provide a useful behavioral framework for studying frontline employee service behavior. Reliability can be reflected in accurate and dependable service. Responsiveness can be reflected in willingness to assist customers promptly. Assurance can be reflected in confidence, competence, and professional explanations. Empathy can be reflected in individualized attention and emotional sensitivity. Tangibility can be reflected in appearance, branch setting, and visible professionalism.

Frontline employees act as the operational embodiment of the bank's service promise. Customers often interpret the bank through the behavior of the employee at the counter or service desk. A technically correct transaction may still be perceived negatively if the employee communicates poorly, appears indifferent, or fails to explain delays. Conversely, a difficult service situation may be repaired when the employee responds respectfully, explains options clearly, and takes ownership. Service-quality behavior thus captures the employee-side enactment of service quality during operational interactions, reflecting how frontline employees behaviorally operationalize organizational service standards during customer encounters (Liao & Chuang, 2004; Karatepe & Karadas, 2015).

In banking, service-quality behavior is influenced by both technical and relational competencies. Product knowledge supports reliability and assurance because customers require accurate explanations. Problem solving supports service recovery because complaints and exceptions are unavoidable. Social etiquette supports empathy and customer trust because banking often involves sensitive financial matters. Multitasking supports responsiveness because employees must coordinate several demands at once. Timeliness contributes to perceptions of operational efficiency. Personal appearance contributes to tangible professionalism and organizational discipline.

Nevertheless, service quality is not purely an individual responsibility. Banking employees operate within systems, procedures, compliance requirements, staffing levels, and technology platforms that may support or restrict service behavior.

This is why the present study interprets service-quality behavior as the behavioral expression of competencies within real operating conditions rather than as a

simple consequence of training attendance.

Employee Engagement and Behavioral Transfer

Employee engagement has become an important concept in human-resource management and organizational behavior because it captures the extent to which employees invest physical, cognitive, and emotional energy in their work. Schaufeli and colleagues conceptualized engagement through vigor, dedication, and absorption. Vigor reflects energy and persistence. Dedication reflects involvement, enthusiasm, and significance. Absorption reflects concentration and immersion in work. Engaged employees are generally more willing to persist, solve problems, support customers, and invest discretionary effort.

The Job Demands-Resources model provides a strong explanation for engagement in demanding service environments. The model proposes that job resources such as training, supervisory support, feedback, autonomy, and recognition can enhance engagement, especially when employees face demanding work conditions. Frontline banking employees face queue pressure, emotional customer interactions, compliance obligations, system dependency, and time pressure. Under these conditions, engagement may influence whether employees use acquired competencies actively or merely perform routine tasks with minimal effort.

Engagement is relevant to training transfer because learning must be activated in behavior. A disengaged employee may possess product knowledge but may not explain patiently. A disengaged employee may know complaint-handling steps but may not take ownership. In contrast, an engaged employee is more likely to apply knowledge, persist through service difficulties, and communicate with greater attentiveness. Accordingly, employee engagement may moderate the relationship between competency building and service-quality behavior because psychologically engaged employees are more likely to behaviorally apply acquired competencies during demanding customer interactions (Bakker & Demerouti, 2017; Rich et al., 2010).

Social Exchange Theory also supports this argument. Employees who perceive training and development as organizational investment may reciprocate through stronger commitment and positive service behavior. When training signals that the organization values employee development, engaged employees may be especially likely to convert acquired competencies into helpful workplace behavior. This provides the theoretical basis for the moderating role of engagement in the present study.

Research Gap

Several gaps justify the present study. Firstly, much training literature continues to emphasize learning outcomes, satisfaction, or immediate reactions rather than actual behavioral transfer. For banks, this is insufficient because training is valuable only when it changes frontline service behavior. Secondly, many studies examine generic training programs rather than interventions designed around actual operational gaps. The present study uses Subject Matter Expert input to develop a training intervention linked to frontline banking realities. Thirdly, employee engagement is often studied as an outcome or mediator, but less frequently as a moderator that determines whether competencies are behaviorally enacted. Fourthly, limited empirical evidence exists within Sri Lankan commercial banking on the integrated relationship among competency building, engagement, and service-quality behavior.

Finally, few studies combine a longitudinal pre-post training design with

PLS-SEM analysis of post-training behavioral relationships.

The present study addresses these gaps by examining whether competency-building dimensions influence frontline service-quality behavior and whether employee engagement strengthens those relationships. In doing so, the study contributes to training evaluation, engagement theory, and service-quality research while also offering practical guidance for HR professionals responsible for learning and development in banking.

Relevance to HRM and Banking Practice

The present topic is directly relevant to human-resource management because training, engagement, and service quality are not isolated operational concerns. They represent interconnected HR responsibilities. Training departments design competency-building programs, line managers influence the transfer climate, and HR leaders are expected to demonstrate that human-capital expenditure contributes to organizational outcomes. In banking, this connection becomes particularly visible because customer experience is produced through frontline employee behavior.

HR professionals therefore require evidence on which competencies matter most, how training should be evaluated, and how engagement affects transfer. Without such evidence, training may continue as a routine activity measured by attendance and satisfaction rather than by behavioral value. A behavior-focused approach helps HR professionals shift from activity-based reporting to outcome-based evaluation. It also helps justify development investments to senior management by connecting training expenditure with service-quality improvement.

The study's triadic framework is important because it links capability, motivation, and behavior. Competency building represents capability development. Employee engagement represents motivational activation. Service-quality behavior represents the operational expression of both capability and motivation. This triad provides a practical model for HR professionals who need to design interventions that do more than increase knowledge. It shows that the real objective of training is not simply learning but behavior that improves customer experience.

This perspective also has implications for workforce planning. If banks invest heavily in systems and digital channels but neglect frontline behavioral capability, customer trust may weaken when customers require human support. Conversely, if banks invest in training but ignore employee engagement, acquired competencies may remain underused. As a result, HR professionals need integrated strategies that combine competency development with engagement management, supervisor involvement, and post-training performance monitoring.

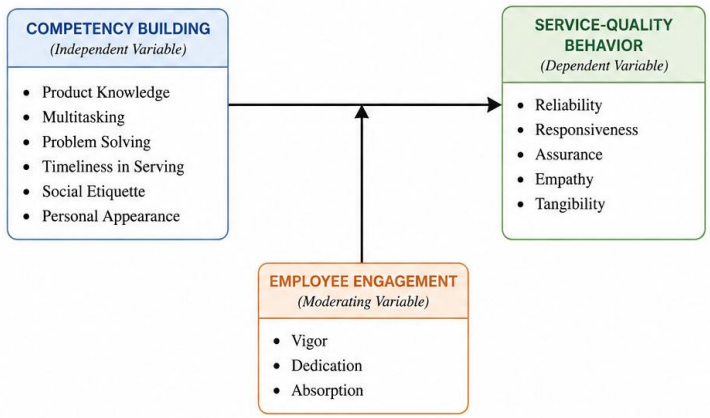
Overall, the reviewed literature confirms the importance of competency development, employee engagement, and service-quality behavior within frontline service environments. However, existing studies have largely examined these constructs separately, with limited empirical attention given to their integrated interaction within commercial banking contexts. In particular, limited evidence exists regarding the moderating role of employee engagement in strengthening the behavioral transfer of competencies into service-quality behavior following training interventions. The present study addresses this gap through a longitudinal evaluation of frontline employees in Sri Lankan commercial banking.

Conceptual Framework and Hypotheses

The conceptual framework integrates Human Capital Theory, the Job Demands-Resources model, and Social Exchange Theory. Human Capital Theory explains why organizations invest in employee capability development. The Job Demands-Resources model explains how engagement energizes employees to apply competencies under demanding conditions. Social Exchange Theory explains why employees may reciprocate development opportunities through improved workplace behavior.

The study proposes that six competency-building dimensions' influence service-quality behavior. These dimensions are product knowledge, multitasking, problem solving, timeliness in serving, social etiquette, and personal appearance. Employee engagement is positioned as a moderating construct that may strengthen or weaken the relationship between each competency dimension and service-quality behavior.

Figure 1. Conceptual Framework of the Study



Source: Developed by Researcher, 2026

H1: Product knowledge positively influences service-quality behavior.
H2: Multitasking positively influences service-quality behavior.
H3: Problem solving positively influences service-quality behavior.
H4: Timeliness in serving positively influences service-quality behavior.
H5: Social etiquette positively influences service-quality behavior.
H6: Personal appearance positively influences service-quality behavior.
H7: Employee engagement moderates the relationship between product knowledge and service-quality behavior.
H8: Employee engagement moderates the relationship between multitasking and service-quality behavior.
H9: Employee engagement moderates the relationship between problem solving and service- quality behavior.
H10: Employee engagement moderates the relationship between timeliness in serving and Service-Quality behavior.
H11: Employee engagement moderates the relationship between social etiquette and service-quality behavior.
H12: Employee engagement moderates the relationship between personal appearance and service-quality behavior.

Methodology

The study adopted a quantitative longitudinal survey design. The research was conducted in a leading commercial bank in Sri Lanka selected because of its large branch network, extensive frontline customer interaction, and strategic emphasis on employee development and service quality. The single-bank setting enabled consistency in organizational procedures, service expectations, training implementation, and work context during the intervention and evaluation period.

The study population consisted of frontline Banking Associates attached to 255 branches. These employees were selected because they directly manage customer-service windows in branches and play a central role in service-quality enactment. Out of the branch network, 150 Banking Associates were selected on a random basis through the bank's learning and development function. After matching pre-training and post-training responses and removing incomplete cases and outliers, 142 matched responses were retained.

The adequacy of the sample was supported through both the Krejcie and Morgan sampling framework and contemporary PLS-SEM recommendations. The retained sample exceeded the minimum thresholds generally recommended for complex structural models involving moderation and higher-order constructs (Hair et al., 2022).

A two-day competency-building intervention was specially designed with input from Subject Matter Experts who had practical experience in branch banking, customer service, complaint handling, training, and operational management. The intervention was not a generic training package. It addressed actual frontline service gaps, customer-handling difficulties, queue pressure, complaint situations, communication challenges, and procedural issues observed in banking operations. The intervention focused on product knowledge, multitasking, problem solving, timeliness in serving, social etiquette, and personal appearance.

Competency building was measured using a researcher-developed questionnaire based on SME input. Service-quality behavior was measured using an adapted behavioral version of SERVQUAL from the employee perspective rather than customer satisfaction. Critical incident scenarios were used only for the service-quality behavior questionnaire to reflect realistic banking situations such as account opening problems, delayed service, complaint handling, documentation confusion, and difficult customer interactions. Employee engagement was measured using the Utrecht Work Engagement Scale covering vigor, dedication, and absorption.

The competency-building and service-quality behavior instruments used seven-point Likert scales to improve response sensitivity. Employee engagement used the standard Utrecht response format. The instruments were reviewed by SMEs and pilot tested before the main study to improve clarity, contextual relevance, and content validity.

SPSS was used for data screening, descriptive statistics, normality assessment, reliability analysis, and paired sample t-tests comparing pre-training and post-training responses. SmartPLS was used for PLS-SEM analysis. The measurement model was assessed using Cronbach's alpha, Composite Reliability, Average Variance Extracted, outer loadings, and HTMT. The structural model was assessed using path coefficients, t-values, p-values, R-square, Q-square, effect sizes, VIF, and bootstrapping procedures. The final measurement model retained indicators

that satisfied recommended loading and validity thresholds.

The descriptive and paired sample analyses considered both pre-training and post-training data, while the measurement and structural model assessments were based on post-training responses because the primary objective was to examine behavioral transfer after the intervention.

The intervention and survey process were administered through the bank's learning and development function in a manner that preserved procedural consistency across participants. Respondents were informed about the purpose of the study and the academic nature of the analysis. Participation was voluntary, confidentiality was assured, and responses were used solely for academic research purposes. The survey was designed to examine competency building, engagement, and service-quality behavior at an aggregate level rather than to assess individual employees for disciplinary or performance-management purposes. This distinction was important because respondents needed to provide honest assessments of their perceived capability and behavior.

The use of matched pre-training and post-training responses enabled longitudinal comparison while maintaining analytical consistency. Data cleaning procedures were carried out before final analysis in order to remove incomplete responses and statistical outliers. The final sample of 142 matched cases provided an adequate basis for the paired sample comparisons and PLS-SEM analysis. The use of both SPSS and SmartPLS strengthened the analysis because descriptive changes and structural relationships were examined through appropriate statistical procedures. The structural model was operationalized with the six competency areas modeled as first-order constructs, while Employee Engagement and Service-Quality Behavior were modeled as higher-order constructs. This design captures the granular impact of specific competencies while maintaining analytical parsimony by aggregating the higher-order dimensions of engagement and service quality

The use of a single organization was suitable for the purpose of the present intervention-based study. A multi-bank design may improve generalizability, but the single-bank context enabled stronger consistency in training design, service procedures, organizational systems, and participant exposure. This was especially important because the study involved a specially designed training intervention and post-training behavioral evaluation. The limitation is acknowledged, but the design is methodologically defensible because the objective was to examine behavioral transfer within a controlled organizational context.

Table 1. Operationalization of Constructs and Measurement Sources

Construct	Dimensions	Source basis	Example measurement focus
Product Knowledge	Banking products and procedures	Researcher developed with SME input	Explaining banking procedures accurately
Multitasking	Simultaneous task handling	Frontline banking competency literature and SME input	Managing multiple customer and operational demands

Construct	Dimensions	Source basis	Example measurement focus
Problem Solving	Complaint handling and service recovery	Service recovery literature and SME input	Resolving customer problems effectively
Timeliness in Serving	Responsiveness and service speed	SERVQUAL responsiveness adaptation	Serving customers efficiently
Social Etiquette	Courtesy, empathy, professionalism	Interpersonal service-quality literature	Interacting respectfully-with customers
Personal Appearance	Grooming and presentation	SERVQUAL tangibility adaptation	Maintaining professional appearance
Employee Engagement	Vigor, dedication, absorption	Utrecht Work Engagement Scale	Psychological energy and involvement
Service-Quality Behavior	Reliability, responsiveness, assurance, empathy, tangibility	Adapted SERVQUAL with critical incidents	Employee enactment of service quality

Source: Author, 2026

Discussion of Findings

Data screening confirmed that 142 matched cases were suitable for final analysis. Descriptive statistics indicated improvements across all competency dimensions and service-quality behavior indicators following the intervention. Paired sample t-tests showed statistically significant improvements, supporting the effectiveness of the SME-driven training program at the learning and early behavioral levels.

The measurement model demonstrated acceptable reliability and convergent validity. Composite reliability values were acceptable or reasonably close to recommended levels, while all AVE values exceeded the recommended threshold of 0.50. HTMT values confirmed discriminant validity, and VIF values indicated no serious multicollinearity concerns.

The direct path results revealed that product knowledge, multitasking, problem solving, and social etiquette significantly influenced service-quality behavior. Product knowledge was important because employees who understand products and procedures can provide accurate explanations, reduce ambiguity, and inspire customer confidence. Multitasking showed a strong effect because frontline banking requires employees to manage simultaneous customer and operational demands.

Problem solving was significant because complaint handling and service recovery are central to customer trust. Social etiquette was significant because courtesy, empathy, emotional control, and respectful communication are immediately visible to customers.

Timeliness in serving and personal appearance did not show significant direct effects. This does not imply that they are unimportant. Rather, they may function as baseline expectations in banking operations. Timeliness may also be constrained by systems, compliance

requirements, staffing levels, documentation checks, and customer volume. Similarly, personal appearance is usually standardized by organizational policy, making it less likely to differentiate service-quality behavior once minimum standards are consistently maintained. The moderation results showed that employee engagement strengthened the effects of product knowledge, problem solving, timeliness in serving, and social etiquette on service-quality behavior. These findings indicate that competencies become more behaviorally valuable when employees are psychologically engaged. Engaged employees are more likely to explain patiently, persist during service recovery, maintain courtesy under pressure, and demonstrate urgency when serving customers. This supports the Job Demands–Resources model and extends Human Capital Theory by showing that capability development alone is insufficient for consistent behavioral enactment.

Table 2. Structural Model Quality Indicators

Indicator	Value	Interpretation
R-square: Service-Quality Behavior	0.960	Substantial explanatory power
Q-square	0.621	Strong predictive relevance
SRMR	0.071	Acceptable model fit
NFI	0.913	Acceptable model fit
Maximum VIF	2.847	No critical multicollinearity

Source: SmartPLS Output Summary

Table 3. Structural Model Results and Hypothesis Testing

Hypothesis	Relationship	Beta	t-value	p-value	Decision
H1	Product Knowledge -> Service-Quality Behavior	0.271	2.868	0.004	Supported
H2	Multitasking -> Service-Quality Behavior	0.702	21.406	<0.001	Supported
H3	Problem Solving -> Service-Quality Behavior	0.642	18.831	<0.001	Supported
H4	Timeliness in Serving -> Service-Quality Behavior	-0.068	0.384	0.701	Not supported
H5	Social Etiquette -> Service-Quality Behavior	0.578	10.527	<0.001	Supported

Hypothesis	Relationship	Beta	t-value	p-value	Decision
H6	Personal Appearance -> Service-Quality Behavior	-0.106	0.649	0.516	Not supported
H7	Engagement x Product Knowledge -> Service-Quality Behavior	0.132	2.279	0.023	Supported
H8	Engagement x Multitasking -> Service-Quality Behavior	-0.040	0.242	0.809	Not supported
H9	Engagement x Problem Solving -> Service-Quality Behavior	0.125	1.962	0.050	Supported
H10	Engagement x Timeliness -> Service-Quality Behavior	0.138	2.330	0.020	Supported
H11	Engagement x Social Etiquette -> Service-Quality Behavior	0.149	2.403	0.016	Supported
H12	Engagement x Personal Appearance -> Service-Quality Behavior	0.145	0.818	0.413	Not supported

Note: Beta = standardized path coefficient. Significance assessed using bootstrapping in SmartPLS, 2026

Employee engagement did not significantly moderate the effects of multitasking and personal appearance. Multitasking may operate as a more embedded operational capability shaped by workflow routines, systems, and task coordination. Personal appearance may function more as a hygiene factor governed by organizational standards than as a competency strengthened through motivational activation. These findings suggest that engagement does not amplify all competencies equally, but rather influences selected competencies depending on their behavioral nature.

Overall, the findings support a conditional model of training effectiveness. Competency building contributes to service-quality behavior, but the conversion of competence into visible frontline behavior depends partly on employee engagement. This is particularly relevant for commercial banking because training investments are often evaluated through attendance, participant reactions,

or learning outcomes rather than actual behavioral transfer and workplace application (Kirkpatrick & Kirkpatrick, 2016; Noe, 2020). The findings reinforce the importance of evaluating whether acquired competencies are behaviorally enacted during customer interactions.

Table 4. Reliability and Convergent Validity Assessment

Construct	Cronbach Alpha	Composite Reliability	AVE
Product Knowledge	0.842	0.884	0.603
Multitasking	0.856	0.892	0.624
Problem Solving	0.861	0.898	0.638
Timeliness in Serving	0.801	0.857	0.548
Social Etiquette	0.710	0.725	0.541
Personal Appearance	0.784	0.845	0.577
Employee Engagement	0.912	0.928	0.682
Service-Quality Behavior	0.924	0.937	0.711

Note: All AVE values exceeded the recommended threshold of 0.50, while composite reliability values were acceptable or reasonably close to recommended levels.

Interpretation of Significant Competencies

The pattern of significant findings shows that service-quality behavior is not produced by a single universal competency. Instead, frontline banking service behavior is shaped by a combination of technical capability, operational coordination, interpersonal conduct, and motivational engagement. This differentiated pattern gives the study practical relevance because it discourages the assumption that all training topics contribute equally to service outcomes. Training design should be guided by evidence regarding which competencies generate behavioral value and under what psychological conditions that value is most effectively realized.

The strong effect of multitasking is particularly meaningful within modern branch banking. Frontline employees frequently move between customer inquiries, transaction verification, system navigation, queue management, compliance checks, and internal coordination. Employees who lack multitasking capability may become overwhelmed even when they possess product knowledge. Under such conditions, service quality may deteriorate because customers experience delays, repeated explanations, or reduced employee attention. The finding therefore confirms that operational coordination is not merely an administrative skill but an important service-quality competency.

Problem solving also emerged as a significant predictor because service recovery situations often reveal the true quality of a bank. Customers may tolerate errors, delays, or procedural requirements when employees take ownership, explain available options, and guide them toward solutions. However, unclear explanations and avoidance of responsibility can intensify dissatisfaction. The findings support the importance of complaint handling and problem-solving capability within frontline banking training interventions.

The finding on social etiquette reinforces the relational nature of banking service. Banking interactions are frequently connected to customers' financial

security, business continuity, personal plans, and emotional concerns. Respectful communication, patience, empathy, and emotional sensitivity can reduce customer tension even when immediate solutions are not possible. This supports the view that service quality is influenced not only by systems and procedures but also by the manner in which employees behave within those systems.

Interpretation of Non-Significant Findings

The non-significant effect of timeliness should be interpreted carefully. Although speed remains important in banking, actual service time is often influenced by system constraints, authorization requirements, documentation procedures, compliance checks, staffing levels, and customer volume. Employees may be competent and willing to serve quickly, yet actual processing duration may depend on operational factors beyond their direct control. Nevertheless, the significant moderation effect involving engagement suggests that engaged employees may still improve the behavioral meaning of timeliness through urgency, attentiveness, communication, and proactive customer handling. Timeliness appears to function as a conditional competency rather than a purely individual capability.

The non-significant effect of personal appearance also requires balanced interpretation. Professional appearance remains part of banking discipline and visible service standards. However, when dress and grooming expectations are already institutionalized, appearance may become a minimum operational requirement rather than a strong source of service differentiation. Customers may notice poor appearance, but once acceptable professional standards are met, additional differences in grooming may have limited influence on perceived service-quality behavior.

Theoretical and Managerial Interpretation

The moderation findings represent one of the most important contributions of the study. The results indicate that employee engagement does not merely exist as a favorable psychological condition but functions as a behavioral activator that strengthens the practical application of competencies. Engaged employees appear more likely to convert acquired knowledge, interpersonal capability, and problem-solving skills into visible customer-service behavior during demanding operational situations.

These findings extend the explanatory value of Human Capital Theory by suggesting that competency development creates behavioral potential rather than automatic performance. Employee engagement influences whether acquired competencies are behaviorally enacted in real service environments. In this respect, the findings also complement the Job Demands–Resources model and Social Exchange Theory, both of which emphasize the importance of psychological and motivational conditions in shaping employee behavior.

The findings are highly relevant for organizations that invest heavily in training but fail to observe proportional improvements in service performance. The issue may not always be poor training design or inadequate technical content. Instead, weak engagement, excessive workload, poor transfer climate, limited supervisory support, and low motivational energy may reduce behavioral transfer after training.

Consequently, organizations should treat competency development and employee engagement as interconnected HRD responsibilities rather than separate HR activities.

Managerial Interpretation of the Statistical Results

The statistical findings should be interpreted not only as hypothesis outcomes but also as managerial signals. The significant direct effects show which competencies are most strongly associated with frontline service-quality behavior after training. Multitasking, problem solving, product knowledge, and social etiquette should receive priority in frontline capability-building initiatives. These competencies reflect the real demands of branch banking, where employees must combine technical accuracy, operational coordination, customer reassurance, and interpersonal professionalism.

The non-significant findings are also useful for managerial decision making. Timeliness and personal appearance should not be removed from training, but they should be treated differently. Timeliness may require workflow redesign, digital-system reliability, staffing support, and process simplification in addition to individual training. Personal appearance may require policy reinforcement and branch-level supervision rather than extensive training investment. This distinction helps HR professionals allocate training resources more efficiently.

The moderation results indicate that engagement strengthens the behavioral value of selected competencies. This has practical importance because it shows that training and engagement should not be managed separately. A bank may design technically sound training, but if employees return to branches characterized by high workload, low recognition, weak supervision, or poor morale, behavioral transfer may remain limited. Conversely, when employees are engaged, the same competencies may be expressed more consistently in customer interactions.

The findings therefore encourage banks to adopt a post-training support system. Such a system may include branch manager coaching, follow-up discussions, recognition for improved service behavior, refresher sessions, peer learning, and service-quality monitoring. These practices help convert training content into daily behavior and make the investment more visible in operational outcomes.

Contribution to Theory and Practice

The study makes a theoretical contribution by refining the traditional human-capital argument. Human Capital Theory is often interpreted as suggesting that investment in training produces improved performance because employees become more capable. The present findings support the value of capability development, but they also show that capability is not the same as behavioral enactment. Competencies must be activated within real work conditions. This distinction is particularly important in-service organizations because performance is not stored inside employees as knowledge but displayed through behavior in front of customers.

The study also contributes to the engagement literature by positioning engagement as a moderator rather than only as an outcome or direct predictor. This also extends the traditional Human Capital Theory perspective by introducing employee engagement as a moderating psychological mechanism influencing the translation of competency development into behavioral performance. In doing so, the study complements the Job Demands–Resources model and Social Exchange Theory, both of which emphasize the psychological and motivational conditions supporting the behavioral application of acquired competencies.

This is important because engagement explains why employees with similar competencies may behave differently. A

highly engaged employee may use product knowledge to explain patiently, while a less engaged employee may provide only minimal information. A highly engaged employee may treat a complaint as an opportunity for service recovery, while a less engaged employee may treat it as an inconvenience. Engagement therefore influences the behavioral quality of competency use.

The study contributes to service-quality research by adapting SERVQUAL dimensions to examine employee-perceived service-quality behavior rather than customer satisfaction alone. This is appropriate for the present purpose because the study is concerned with how frontline employees perceive and enact service-quality behaviors following a training intervention. Customer perceptions remain important, but employee-side behavioral measurement provides a useful internal evaluation perspective, especially when it is difficult to connect individual customers to specific employees in busy branch operations.

The study also contributes methodologically by combining a longitudinal training intervention with PLS-SEM assessment of post-training relationships. Many training studies rely on cross-sectional designs or immediate post-training evaluations. The present design provides stronger evidence by examining competency development over time and by analyzing whether post-training competencies are linked to service-quality behavior under different levels of engagement.

For HR practice, the most important contribution is the movement from training delivery to behavioral accountability. The study provides evidence that learning and development functions should not evaluate success only through attendance, reaction forms, or knowledge tests. They should ask whether employees apply learning in ways that improve customer-facing behavior. This is especially important in banks because service quality directly influences customer trust, retention, and reputation.

Practical Implications to HR Professionals

The findings provide several important implications for HR professionals in commercial banking. Firstly, competency-building programs should be designed around actual frontline service challenges rather than generic training modules. SME involvement is particularly valuable because it helps align training content with operational realities and customer expectations.

Secondly, training effectiveness should be evaluated at the behavioral-transfer level rather than relying only on learning tests or immediate participant reactions. Banks should incorporate post-training behavioral assessments, supervisor observations, complaint trends, and service-quality indicators into evaluation systems.

Thirdly, employee engagement should be treated as an important condition that strengthens training transfer and behavioral application within frontline service environments (Bakker & Albrecht, 2018; Saks, 2022). Training initiatives should be supported by engagement-enhancing practices such as supportive supervision, coaching, recognition, manageable workloads, and positive service climates.

Finally, the findings suggest that not all competencies influence service-quality behavior equally. Product knowledge, problem solving, and social etiquette appear strongly linked to behavioral performance, whereas timeliness and personal appearance may be influenced more by systems, operational procedures, and organizational standards. Consequently, service-quality

improvement requires both competency development and broader operational support mechanisms.

Managerial Recommendations

Banks should conduct systematic training-needs assessments using customer complaints, operational difficulties, service delays, and frontline employee feedback. Training programs should also incorporate realistic banking scenarios to strengthen both technical and interpersonal competencies.

In addition, organizations should establish post-training transfer mechanisms such as coaching, refresher learning, supervisor monitoring, and branch-level follow-up discussions to ensure behavioral application after training. Employee engagement should also be monitored alongside training interventions because weak engagement may reduce the practical transfer of acquired competencies into customer-service behavior.

Limitations and Future Research

While this study offers a controlled examination of training and performance dynamics, certain methodological parameters warrant consideration regarding the broader application of the findings. Specifically, the research was conducted within a single commercial bank. Although this approach provided robust control over training implementation, work context, and measurement conditions, it may limit the external generalizability of the results to diverse organizational environments. Future research would benefit from testing this framework across multiple banking institutions, non-bank financial entities, and varied service sectors to validate the consistency of the observed competency and engagement patterns.

Secondly, service-quality behavior was measured from the employee perspective. This approach was appropriate because the study focused on the employee-side behavioral enactment of service quality following training. It also avoided the practical difficulty of linking individual customers to specific frontline employees across busy branch operations. Nevertheless, future research could strengthen the evidence base by incorporating customer ratings, supervisor assessments, mystery-shopping evaluations, complaint data, and objective service-performance indicators.

Thirdly, the post-training evaluation was conducted one month after the intervention. This interval was useful for assessing early transfer, but it may not fully capture long-term sustainability. Future studies should include longer follow-up periods such as three months, six months, or one year after training. Such designs would help determine whether service-quality behavior is sustained, declines, or improves further with managerial support and practice.

Fourthly, the study examined employee engagement as the main moderator. Future studies could include additional moderators such as supervisory support, transfer climate, service climate, workload intensity, digital-system quality, emotional exhaustion, organizational justice, and branch-level leadership. These factors may help explain why some employees apply competencies more effectively than others.

Fifthly, the study focused on six competency dimensions identified as relevant to frontline banking. Future research could examine additional competencies such as digital literacy, emotional intelligence, compliance orientation, customer education capability, ethical judgment, and resilience. These may become increasingly important as banking shifts toward digital and hybrid service channels.

Despite these limitations, the study provides a strong foundation for future research on behavior-focused training evaluation and engagement-enabled service performance. It demonstrates the value of moving beyond simple training attendance measures and toward integrated models that connect learning, motivation, and customer-facing behavior.

Conclusion

The study examined the relationship between competency building and service-quality behavior among frontline employees in commercial banking and investigated the moderating role of employee engagement. The findings demonstrated that competency development contributes to service-quality behavior in differentiated ways. Product knowledge, multitasking, problem solving, and social etiquette emerged as significant predictors of service-quality behavior, while timeliness in serving and personal appearance did not show significant direct effects.

Employee engagement significantly strengthened several competency-behavior relationships. This finding confirms that competency development alone may not automatically produce behavioral transfer. Employees must also be psychologically engaged, attentive, and willing to apply acquired competencies in demanding service environments.

The study contributes to literature by integrating competency building, employee engagement, and service-quality behavior within a single framework. It extends Human Capital Theory by showing that employee capability creates behavioral potential rather than automatic performance. It also supports the Job Demands-Resources model by showing that engagement energizes behavioral application under demanding conditions.

From a training evaluation perspective, the study reinforces the importance of distinguishing learning outcomes from behavioral outcomes.

The study has limitations. It was conducted within one commercial bank, which may limit generalizability. Service-quality behavior was measured through employee self-perception, although this was suitable for examining perceived behavioral enactment after training. The post-training interval captured early transfer effects but not long-term sustainability. Future research should examine multiple banks, longer transfer windows, customer evaluations, supervisory ratings, and objective service-quality metrics.

Despite these limitations, the study provides useful evidence for commercial banks and HR professionals. It shows that training effectiveness should be evaluated through behavioral transfer and service improvement, not merely through participation or immediate learning. It also highlights the strategic value of employee engagement in improving the return on competency-building investments.

The findings therefore reinforce the strategic importance of integrating competency development and employee engagement in order to achieve sustainable service-quality performance within frontline banking environments.

References

Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals, teams, organizations, and society. *Annual Review of Psychology, 60*, 451–474. https://doi.org/10.1146/annurev.psych.60.110707.163505

Bakker, A. B., & Albrecht, S. L. (2018). Work engagement: Current trends. *Career Development International, 23*(1), 4–11. https://doi.org/10.1108/CDI-11-2017-0207

Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology, 22*(3), 273–285. https://doi.org/10.1037/ocp0000056

Bakker, A. B., & Demerouti, E. (2024). Job demands-resources theory: Frequently asked questions. *Journal of Occupational Health Psychology, 29*(3), 188–200. https://doi.org/10.1037/ocp0000376

Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology, 41*(1), 63–105. https://doi.org/10.1111/j.1744-6570.1988.tb00632.x

Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago Press.

Bell, B. S., Tannenbaum, S. I., Ford, J. K., Noe, R. A., & Kraiger, K. (2017). 100 years of training and development research: What we know and where we should go. *Journal of Applied Psychology, 102*(3), 305–323. https://doi.org/10.1037/apl0000142

Blau, P. M. (1964). *Exchange and power in social life*. Wiley.

Blume, B. D., Ford, J. K., Surface, E. A., & Olenick, J. (2019). A dynamic model of training transfer. *Human Resource Management Review, 29*(2), 270–283. https://doi.org/10.1016/j.hrmr.2017.11.004

Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human Resource Development Review, 6*(3), 263–296. https://doi.org/10.1177/1534484307303035

Flanagan, J. C. (1954). The critical incident technique. *Psychological Bulletin, 51*(4), 327–358. https://doi.org/10.1037/h0061470

Ford, J. K., Baldwin, T. T., & Prasad, J. (2018). Transfer of training: The known and the unknown. *Annual Review of Organizational Psychology and Organizational Behavior, 5*, 201–225. https://doi.org/10.1146/annurev-orgpsych-032117-104443

Gremler, D. D. (2004). The critical incident technique in service research. *Journal of Service Research, 7*(1), 65–89. https://doi.org/10.1177/1094670504266138

Grönroos, C. (2015). *Service management and marketing: Managing the service profit logic* (4th ed.). Wiley.

Grossman, R., & Salas, E. (2011). The transfer of training: What really matters. *International Journal of Training and Development, 15*(2), 103–120. https://doi.org/10.1111/j.1468-2419.2011.00373.x

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). *A primer on partial least squares structural equation modeling (PLS-SEM)* (3rd ed.). Sage.

Karatepe, O. M., & Karadas, G. (2015). Do psychological capital and work engagement foster frontline employees' satisfaction? *International Journal of Contemporary Hospitality Management, 27*(6), 1254–1278. https://doi.org/10.1108/IJCHM-01-2014-0028

Karatepe, O. M., Rezapouraghdam, H., & Hassannia, R. (2020). Job insecurity, work engagement and their effects on hotel employees' non-green and nonattendance behaviors. *International Journal of Hospitality Management, 87*, Article 102472. https://doi.org/10.1016/j.ijhm.2020.102472

Kirkpatrick, J. D., & Kirkpatrick, W. K. (2016). *Kirkpatrick's four levels of training evaluation*. ATD Press.

Kraiger, K., & Ford, J. K. (2021). The science of workplace instruction: Learning and development applied to work. *Annual Review of Organizational Psychology and Organizational Behavior, 8*, 45–72. https://doi.org/10.1146/annurev-orgpsych-012420-060109

Ladhari, R. (2009). A review of twenty years of SERVQUAL research. *International Journal of Quality and Service Sciences, 1*(2), 172–198. https://doi.org/10.1108/17566690910971445

Liao, H., & Chuang, A. (2004). A multilevel investigation of factors influencing employee service performance and customer outcomes. *Academy of Management Journal, 47*(1), 41–58. https://doi.org/10.2307/20159559

Noe, R. A., Clarke, A. D. M., & Klein, H. J. (2014). Learning in the twenty-first-century workplace. *Annual Review of Organizational Psychology and Organizational Behavior, 1*, 245–275. https://doi.org/10.1146/annurev-orgpsych-031413-091321

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing, 64*(1), 12–40.

Rich, B. L., LePine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal, 53*(3), 617–635. https://doi.org/10.5465/amj.2010.51468988

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology, 21*(7), 600–619. https://doi.org/10.1108/02683940610690169

Saks, A. M., & Gruman, J. A. (2014). What do we really know about employee engagement? *Human Resource Development Quarterly, 25*(2), 155–182. https://doi.org/10.1002/hrdq.21187

Saks, A. M. (2022). Caring human resources management and employee engagement. *Human Resource Management Review,32*(3),100835. https://doi.org/10.1016/j.hrmr.2021.100835

Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The science of training and development in organizations: What matters in practice. *Psychological Science in the Public Interest, 13*(2), 74–101. https://doi.org/10.1177/1529100612436661

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies, 3*(1), 71–92. https://doi.org/10.1023/A:1015630930326

Shukla, A., Dash, S., & Kumar, A. (2024). Factors affecting transfer of online training: A systematic literature review and proposed taxonomy. *Human Resource Development Quarterly, 35*(3), 363–390. https://doi.org/10.1002/hrdq.21518

Appendix 1: HTMT Discriminant Validity Matrix

Construct	PK	MT	PS	TS	SE	PA	EE	SQB
Product Knowledge	-							
Multitasking	0.412	-						
Problem Solving	0.521	0.487	-					
Timeliness	0.463	0.512	0.441	-				
Social Etiquette	0.578	0.466	0.604	0.517	-			
Personal Appearance	0.352	0.281	0.314	0.336	0.402	-		
Employee Engagement	0.211	0.298	0.337	0.291	0.428	0.255	-	
Service-Quality Behavior	0.759	0.665	0.553	0.724	0.812	0.842	0.618	-

Note: All the values are within acceptable discriminant validity limits.

Appendix 2: Outer Loadings

Construct	Item Code	Outer Loading
Product Knowledge	PK1	0.742
Product Knowledge	PK2	0.781
Product Knowledge	PK3	0.756
Product Knowledge	PK4	0.733
Multitasking	MT1	0.756
Multitasking	MT2	0.771
Multitasking	MT3	0.748
Problem Solving	PS1	0.884
Problem Solving	PS2	0.901
Problem Solving	PS3	0.862
Timeliness in Serving	TS1	0.711
Timeliness in Serving	TS2	0.744
Social Etiquette	SE1	0.736
Social Etiquette	SE2	0.752
Personal Appearance	PA1	0.802

Construct	Item Code	Outer Loading
Personal Appearance	PA2	0.784
Employee Engagement	EE1	0.745
Employee Engagement	EE2	0.768
Service-Quality Behavior	SQB1	0.846
Service-Quality Behavior	SQB2	0.831

Note: Retained indicators exceeded acceptable loading levels.

Appendix 3: Cross Loadings

Item	PK	MT	PS	TS	SE	PA	EE	SQB
PK1	0.742	0.381	0.442	0.336	0.462	0.281	0.211	0.598
MT1	0.336	0.756	0.417	0.422	0.358	0.252	0.288	0.544
PS1	0.428	0.396	0.884	0.355	0.484	0.306	0.321	0.633
TS1	0.312	0.402	0.344	0.711	0.421	0.298	0.264	0.571
SE1	0.462	0.366	0.501	0.417	0.736	0.344	0.388	0.648
PA1	0.284	0.244	0.301	0.312	0.398	0.802	0.236	0.412
EE1	0.228	0.281	0.314	0.266	0.421	0.238	0.745	0.518
SQB1	0.612	0.548	0.631	0.581	0.662	0.418	0.524	0.846

Note: Each indicator loaded highest on its assigned construct.

Appendix 4: Assessment of Multicollinearity

Construct or Interaction	VIF
Product Knowledge	1.842
Multitasking	2.106
Problem Solving	1.774
Timeliness in Serving	1.563
Social Etiquette	2.214
Personal Appearance	1.908
Employee Engagement	1.445
Engagement x Product Knowledge	1.982
Engagement x Multitasking	2.137
Engagement x Problem Solving	1.864
Engagement x Timeliness	1.641
Engagement x Social Etiquette	2.241
Engagement x Personal Appearance	1.954

Note: All VIF values remained below conservative threshold levels.