Impact of Experiential Learning and Reflective Thinking on Developing Professional Competence for Rational Decision Making and Enhanced Performance

Ahmed Raza Khan
PhD Scholar Management Studies Department Bahria University Karachi Campus.

Professor Dr. Aijaz Ali Khoso
Professor, Alhamd Islamic University, Islamabad Campus.
Email: Aijaz.khoso80@gmail.com

Received on: 15-02-2022 Accepted on: 17-03-2022

Abstract

Experiential learning and reflective thinking significantly enhance professional competence, rational decision-making, and overall performance by bridging the gap between theory and practice and promoting continuous self-improvement. By integrating hands-on learning opportunities with structured reflection, professionals develop critical skills, self-awareness, and confidence, which improve their decision-making abilities and job performance. This study employed a cross-sectional quantitative approach, surveying 400 employees from multinational firms in Pakistan using a structured questionnaire. Data were analyzed using SPSS, including descriptive statistics, correlation, and regression analyses. Results indicate that experiential learning and reflective thinking positively and significantly impact professional competence, rational decision-making, and enhanced performance. Furthermore, the mediating role of professional competence between the independent variables and outcomes was confirmed. These findings provide valuable insights for organizations seeking to improve workforce capabilities through learning and reflective practices.

Keywords: Experiential Learning, Reflective Thinking, Professional Competence, Rational Decision-Making, Enhanced Performance

1. Introduction

In today's rapidly evolving organizational landscape, the nature of work has become increasingly complex, dynamic, and knowledge-intensive. Organizations are no longer dependent solely on technical proficiency; instead, they require professionals who can demonstrate adaptive thinking, sound judgment, and rational decision-making in uncertain and ambiguous situations. As global economies shift toward innovation-driven performance systems, the development of professional competence has emerged as a central concern in both academic research and organizational practice. In this context, traditional training approaches that emphasize passive knowledge acquisition are increasingly considered

insufficient for preparing individuals for real-world decision demands. Instead, experiential learning and reflective thinking have gained prominence as powerful mechanisms for fostering deep learning, cognitive development, and performance enhancement (Sheeran et al., 2020; Ryan & Deci, 2017).

Experiential learning is grounded in the principle that individuals learn more effectively through direct engagement with tasks, environments, and challenges rather than through abstract instruction alone. It emphasizes learning-by-doing, where individuals construct knowledge through concrete experiences, experimentation, and feedback integration. This process enables learners to bridge the gap between theory and practice by applying conceptual knowledge in real-life or simulated professional contexts. Research suggests that experiential learning significantly enhances knowledge retention, skill acquisition, and behavioral adaptability, particularly in environments that require problem-solving and decision-making under uncertainty (Su & Reeve, 2011; Ng et al., 2012). In organizational settings, experiential learning is particularly valuable because it aligns learning processes with actual job demands, thereby improving performance relevance and applicability.

Reflective thinking complements experiential learning by enabling individuals to critically analyze their experiences and derive meaningful insights from them. Reflection is not merely the recollection of events; rather, it is a structured cognitive process through which individuals evaluate their actions, identify assumptions, assess outcomes, and reconstruct mental models for future improvement. This reflective process strengthens metacognitive awareness, self-regulation, and critical thinking abilities, all of which are essential for rational decision-making in complex professional environments (Legault et al., 2011). Moreover, reflective thinking helps individuals recognize cognitive biases and emotional influences that may distort judgment, thereby promoting more objective and evidence-based decision-making processes.

The integration of experiential learning and reflective thinking is particularly significant in developing professional competence, which can be understood as a multidimensional construct encompassing knowledge application, technical skills, behavioral adaptability, and decision-making capability. While experiential learning provides the foundational exposure to real-world tasks, reflective thinking ensures that such experiences are meaningfully processed and internalized. Together, these processes facilitate the transformation of experience into structured professional competence. This synergy is critical for developing individuals who can not only perform tasks effectively but also evaluate, adapt, and optimize their performance continuously (Vansteenkiste et al., 2014; Weinstein & Ryan, 2010).

The theoretical foundation for this integration is strongly supported by Self-Determination Theory (SDT), which posits that human motivation and optimal functioning are driven by the fulfillment of three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2000; Ryan & Deci, 2017). Within this framework, experiential learning environments that provide autonomy-supportive conditions—such as choice, ownership of tasks, and meaningful engagement—enhance intrinsic motivation and promote deeper

cognitive engagement. When individuals feel autonomous in their learning process, they are more likely to internalize knowledge and sustain behavioral change over time (Su & Reeve, 2011; Ng et al., 2012). Reflective thinking further reinforces this internalization by encouraging individuals to consciously process their learning experiences and align them with personal and professional goals.

Empirical evidence further supports the role of autonomy-supportive and experiential approaches in enhancing learning outcomes and workplace performance. For example, studies have shown that interventions grounded in experiential and autonomy-enhancing principles significantly improve engagement, motivation, and behavioral persistence. Similarly, research in social and organizational psychology demonstrates that individuals exposed to reflective dialogue and high-quality listening environments are more open to behavioral change and demonstrate improved openness to learning from feedback (Itzchakov & Weinstein, 2021). These findings highlight the importance of creating learning environments that not only provide experience but also encourage structured reflection and cognitive processing.

Furthermore, rational decision-making is increasingly recognized as a core dimension of professional competence. Decision-making in organizational contexts often involves uncertainty, time constraints, and competing priorities, requiring individuals to balance analytical reasoning with experiential judgment. Experiential learning enhances decision-making by providing individuals with repeated exposure to decision scenarios, thereby improving pattern recognition and situational judgment. Reflective thinking enhances this process by enabling individuals to critically evaluate past decisions, identify errors, and refine decision strategies for future application (Paluck et al., 2021). Together, these processes contribute to more consistent, evidence-based, and rational decision-making behavior.

In addition, experiential learning and reflective thinking play a critical role in enhancing employee performance outcomes. Performance in modern organizations is no longer limited to task completion but includes innovation, adaptability, collaboration, and continuous improvement. Experiential learning fosters skill development through active engagement, while reflection ensures continuous learning and performance optimization. Studies have shown that employees who engage in experiential learning processes demonstrate higher levels of job performance, creativity, and problem-solving ability compared to those who rely solely on formal training methods. This highlights the importance of integrating learning processes into everyday work practices rather than treating learning as a separate activity.

Despite the growing body of literature on experiential learning and reflective thinking, several gaps remain in existing research. First, most studies have been conducted in educational or controlled experimental settings, with limited focus on organizational and professional environments where decision-making complexity is significantly higher. Second, while experiential learning and reflection have been studied independently, fewer studies have explored their combined effect on professional competence development. Third, there

is limited empirical evidence from developing countries, including Pakistan, where organizational structures, cultural dynamics, and training systems differ significantly from Western contexts. These gaps highlight the need for further investigation into how experiential learning and reflective thinking jointly contribute to rational decision-making and enhanced performance in real-world professional settings.

Therefore, this study aims to examine the impact of experiential learning and reflective thinking on developing professional competence, with a specific focus on rational decision-making and enhanced performance outcomes. By integrating Self-Determination Theory and experiential learning perspectives, the study seeks to provide a more comprehensive understanding of how cognitive and experiential processes interact to shape professional effectiveness. The study also contributes to the growing literature on workplace learning by offering empirical insights into how structured learning experiences and reflective practices can be leveraged to improve decision quality and organizational performance, particularly in developing economy contexts.

2. Literature Review

2.1 Experiential Learning

Experiential learning has emerged as a dominant paradigm in modern education and organizational development, emphasizing learning through direct experience rather than passive knowledge acquisition. The foundational work of Kolb conceptualizes experiential learning as a cyclical process involving concrete experience, reflective observation, abstract conceptualization, and active experimentation, forming a continuous learning spiral (Kolb, 1984; Kolb cited in Schön tradition). Contemporary systematic reviews reaffirm that experiential learning is inherently learner-centered, context-dependent, and action-oriented, enabling individuals to integrate cognitive, affective, and psychomotor domains of learning simultaneously (Morris, 2019).

Recent literature further refines this model by emphasizing that experiential learning is not merely participation in activities but requires meaningful engagement with real-world problems, exposure to uncertainty, and active problem-solving. A systematic review of Kolb's model highlights that effective experiential learning involves learners being active participants in authentic contexts, where knowledge is situated in time and place and shaped by lived experience (Morris, 2019). This perspective aligns with the growing recognition that professional competence is developed most effectively when individuals are exposed to realistic work environments that simulate actual decision-making conditions.

In organizational settings, experiential learning has been widely linked to improved performance outcomes, particularly in domains requiring adaptive thinking and problem resolution. Studies indicate that employees who engage in learning-by-doing approaches demonstrate stronger knowledge retention, enhanced skill acquisition, and improved job performance compared to those trained through traditional instructional methods (Sheeran et al., 2020). This supports the argument that experiential learning is not simply a pedagogical tool but a critical mechanism for workforce capability development.

2.2 Reflective Thinking and Its Role in Learning

Reflective thinking is widely recognized as a critical cognitive process that enables individuals to derive meaning from experience. It involves systematic analysis of actions, evaluation of outcomes, and reconstruction of mental models for future improvement. Reflection is typically conceptualized in two forms: reflection-in-action and reflection-on-action, both of which contribute to continuous professional learning and improvement (Schön; Boud et al. framework; cited in reflective learning literature).

Kolb's experiential learning cycle explicitly positions reflective observation as a central stage in transforming experience into knowledge (Kolb, 1984; BMC Medical Education review). Without reflection, experience alone does not guarantee learning; rather, it remains fragmented and context-bound. Reflection enables individuals to critically assess assumptions, identify gaps in reasoning, and reconstruct cognitive schemas that guide future decision-making.

Empirical research demonstrates that reflective thinking enhances metacognitive awareness, critical thinking, and self-regulation, all of which are essential for rational decision-making in professional environments (Legault et al., 2011). Additionally, structured reflective practices, such as guided journaling and reflective dialogue, have been shown to improve learning depth and behavioral change by encouraging individuals to critically evaluate their experiences rather than passively record them (Itzchakov & Weinstein, 2021).

Recent studies also highlight the importance of meta-reflection, where individuals reflect on their own reflective processes, leading to deeper cognitive restructuring and improved professional judgment. This indicates that reflection is not a static activity but a developmental capability that strengthens over time through structured practice.

2.3 Integration of Experiential Learning and Reflective Thinking

The integration of experiential learning and reflective thinking is widely considered essential for transforming experience into actionable knowledge and professional competence. Experiential learning provides the "raw material" of experience, while reflection acts as the cognitive mechanism that converts this experience into structured understanding and actionable insights.

Kolb's model explicitly integrates this relationship, where reflection acts as a bridge between concrete experience and abstract conceptualization, enabling learners to generalize lessons and apply them in new situations (Kolb, 1984; Morris, 2019). Without reflection, experiential learning remains incomplete; without experience, reflection lacks content and relevance.

Recent literature suggests that this integration is particularly powerful in workplace contexts where employees must continuously adapt to changing environments and make complex decisions under uncertainty. Experiential-reflective cycles allow individuals to refine their decision-making strategies over time by learning from both success and failure experiences. This iterative learning process contributes directly to the development of professional

competence, particularly in dynamic organizational environments (Paluck et al., 2021).

Furthermore, structured reflective interventions embedded within experiential learning programs have been shown to significantly improve learning outcomes, engagement, and behavioral change. These interventions encourage individuals to actively connect experience with conceptual knowledge, thereby strengthening both cognitive and behavioral dimensions of competence.

2.4 Professional Competence Development

Professional competence is a multidimensional construct encompassing knowledge application, technical skills, behavioral adaptability, and judgment quality. In contemporary organizations, competence is increasingly defined not only by what individuals know but by how effectively they apply knowledge in real-world decision-making contexts.

Experiential learning contributes to competence development by providing repeated exposure to task-based challenges, enabling individuals to develop procedural knowledge and situational awareness. Reflective thinking complements this process by enabling individuals to evaluate their performance, identify areas for improvement, and refine their decision-making strategies (Vansteenkiste et al., 2014; Ryan & Deci, 2017).

Research in motivation science further indicates that autonomy-supportive learning environments enhance internalization of competence by increasing intrinsic motivation and engagement (Deci & Ryan, 2000; Ng et al., 2012). When individuals are actively engaged in meaningful learning experiences and encouraged to reflect on outcomes, they are more likely to develop sustained professional capabilities rather than superficial task-based skills.

2.5 Rational Decision Making in Professional Contexts

Rational decision-making is a core component of professional competence, particularly in environments characterized by uncertainty, time pressure, and complexity. Experiential learning enhances decision-making by enabling individuals to develop pattern recognition through repeated exposure to real-world situations. Reflection strengthens this process by encouraging critical evaluation of past decisions, thereby reducing cognitive biases and improving judgment quality.

Studies suggest that individuals who engage in experiential-reflective cycles are more likely to develop evidence-based decision-making capabilities, as they continuously refine their mental models based on prior outcomes (Paluck et al., 2021). This iterative process allows professionals to move from intuitive or reactive decision-making toward more analytical and rational approaches.

Moreover, reflective practice has been linked to reduced stereotyping, improved empathy, and enhanced openness to alternative perspectives, all of which contribute to more balanced and rational decision-making in organizational settings (Cikara et al., 2011; Itzchakov & Weinstein, 2021).

2.6 Performance Enhancement through Learning Processes

Employee performance in modern organizations extends beyond task execution to include innovation, adaptability, and continuous improvement. Experiential learning enhances performance by embedding learning within work tasks, while reflection ensures continuous feedback-based improvement.

Empirical evidence indicates that employees engaged in experiential and reflective learning demonstrate higher job performance, improved problem-solving abilities, and greater adaptability compared to those relying solely on formal training programs (Sheeran et al., 2020). Furthermore, structured learning environments that integrate autonomy, feedback, and reflection have been shown to improve long-term behavioral performance and workplace effectiveness.

2.7 Research Gap Identification

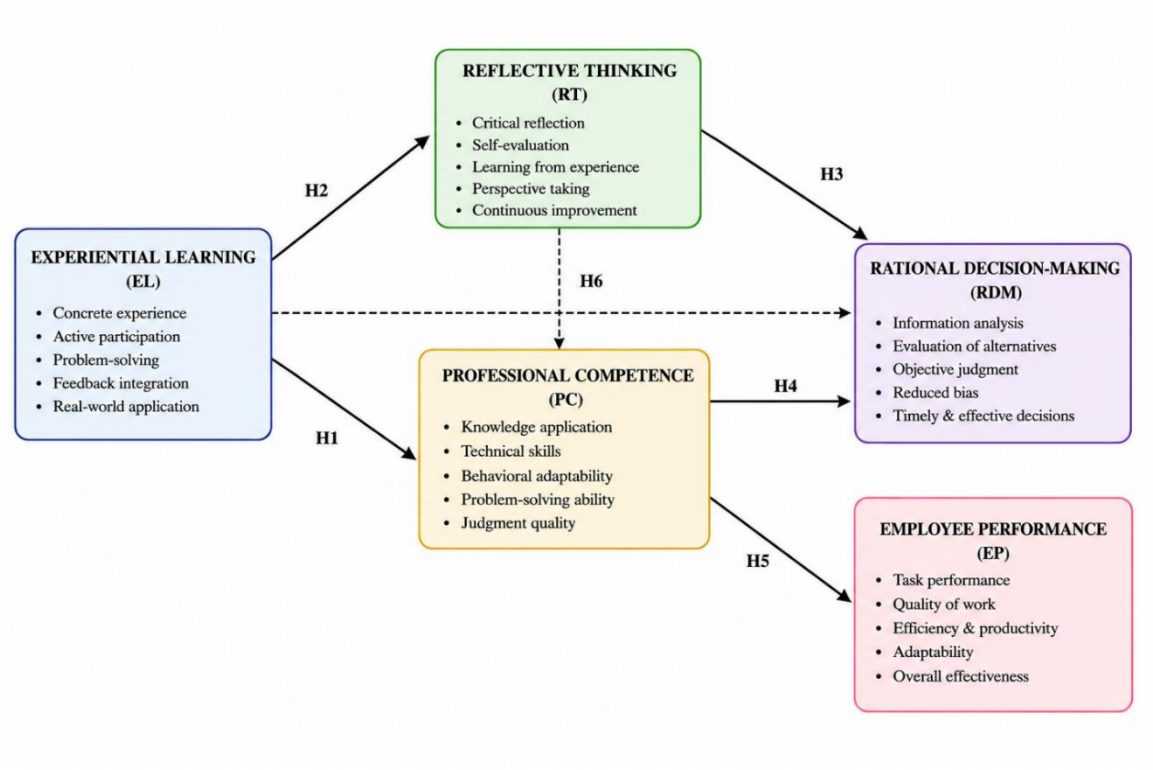
Despite substantial literature on experiential learning and reflective thinking, several gaps remain. First, most studies have been conducted in educational rather than organizational contexts, limiting their applicability to professional environments where decision-making complexity is higher. Second, although experiential learning and reflective thinking are individually well-studied, fewer empirical investigations have explored their combined impact on professional competence development. Third, limited research exists in developing country contexts such as Pakistan, where organizational culture, training systems, and workplace dynamics differ significantly from Western settings.

These gaps highlight the need for empirical investigation into how experiential learning and reflective thinking jointly influence rational decision-making and performance outcomes in professional environments.

The reviewed literature demonstrates that experiential learning provides the foundation for skill and knowledge acquisition, while reflective thinking enables critical evaluation and cognitive restructuring. Together, these processes form a powerful mechanism for developing professional competence, improving rational decision-making, and enhancing organizational performance. However, empirical gaps remain in understanding their integrated effect in real-world professional settings, particularly within developing economies. This study therefore aims to address these gaps by examining the combined impact of experiential learning and reflective thinking on professional competence development.

This study draws on Kolb's Experiential Learning Theory (1984) and Schön's Reflective Practice framework (1987) to explain how EL and RT influence professional competence, rational decision-making, and performance.

2.8 Conceptual Framework



2.9 Hypotheses of Study

H1: Experiential Learning has a positive significant impact on Professional Competence.
H2: Experiential Learning has a positive significant impact on Reflective Thinking.
H3: Reflective Thinking has a positive significant impact on Professional Competence.
H4: Professional Competence has a positive significant impact on Rational Decision-Making.
H5: Professional Competence has a positive significant impact on Employee Performance.
H6: Reflective Thinking has a positive significant impact on Rational Decision-Making.
H7: Professional Competence mediates the relationship between Experiential Learning and Reflective Thinking with Rational Decision-Making and Employee Performance.

3. Research Methodology

This study employs a quantitative, descriptive, and cross-sectional research methodology to investigate the relationships among experiential learning, reflective thinking, professional competence, rational decision-making, and employee performance within organizational settings. Based on the theoretical foundations and conceptual framework, the adopted methodology enables empirical testing of hypothesized relationships and supports generalization of findings within the targeted population. This approach aligns with academic research standards for rigor and validity.

The present study adopts a deductive research approach, which is widely used in

management and organizational research to test theories through empirical observation (Saunders, Lewis, & Thornhill, 2019). In a deductive approach, hypotheses are derived from established theoretical frameworks—namely, Self-Determination Theory, Kolb's Experiential Learning Theory, and Schön's Reflective Practice—and are subsequently tested using quantitative data. Given that this study examines cause-and-effect relationships among the constructs, the deductive approach is appropriate and ensures methodological rigor in hypothesis testing (Sekaran & Bougie, 2020).

3.1 Data Collection

Primary data were collected directly from 400 employees working in various public sector organizations of Pakistan, as they constitute the key population relevant to the study objectives. The unit of analysis was the individual employee, since the research aims to understand perceptions and behaviors related to experiential learning, reflective thinking, competence, decision-making, and performance at the individual level (Sekaran & Bougie, 2020).

Data collection was conducted through a structured survey questionnaire, a widely accepted method for capturing quantitative data in management research (Sekaran & Bougie, 2020). The questionnaire was developed using standardized, validated scales from prior studies to ensure content validity and reliability (Hair et al., 2019). All items were measured using a 5-point Likert scale, ranging from strongly disagree to strongly agree, to gauge respondents' perceptions accurately (Bryman & Bell, 2015).

To determine an appropriate sample size, the study adhered to the sample size determination criteria of Krejcie and Morgan (1970), which suggested a minimum of 300 respondents for the population under consideration. To account for non-responses and incomplete questionnaires, 400 questionnaires were distributed across selected organizations. A total of 336 responses were received and deemed usable after data cleaning, ensuring sufficient data for statistical analysis with SPSS. The data collection process emphasized accuracy, confidentiality, and respondent anonymity to uphold ethical research standards (Sekaran & Bougie, 2020).

3.2 Data Analysis

Data analysis was conducted using SPSS software, employing descriptive and inferential statistical techniques to evaluate the proposed hypotheses.The internal consistency of the measurement scales was assessed using Cronbach's alpha. Values exceeding 0.70 indicated acceptable reliability (Hair et al., 2019). To further verify the internal consistency, composite reliability was also calculated. To ensure construct validity, the factor loadings of each indicator and the Average Variance Extracted (AVE) were examined; loadings above 0.50 and AVE above 0.50 confirmed convergent validity (Fornell & Larcker, 1981). Pearson correlation coefficients were computed to examine the relationships among the constructs and to check for multicollinearity issues.

The primary analytical technique involved multiple regression analysis and correlation

analysis in SPSS to test the direct relationships between variables. Each hypothesis was tested by examining the significance of the regression coefficients, with p-values less than 0.05 indicating statistical significance.

To test the mediating effect of professional competence on the relationship between experiential learning, reflective thinking, and other outcomes, the PROCESS macro for SPSS (Hayes, 2013) was employed. This facilitated bootstrapping procedures to assess indirect effects and their significance.

Throughout the research process, participant confidentiality and anonymity were strictly maintained. No personally identifiable information was collected, and data were aggregated to prevent identification of individual responses, aligning with ethical research standards (Sekaran & Bougie, 2020).

Table 1.
Demographic Profile of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	275	61.1%
Gender	Female	175	38.9%
Age	21–30 Years	142	31.6%
Age	31–40 Years	188	41.8%
Age	41–50 Years	88	19.6%
Age	51+ Years	32	7.1%
Education	Bachelor	164	36.4%
Education	Master	232	51.6%
Education	MS/MPhil	54	12.0%

Table 2
Reliability Statistics

Construct	Items	Cronbach Alpha	Composite Reliability
Experiential Learning	5	0.892	0.913
Reflective Thinking	5	0.876	0.901
Professional Competence	6	0.914	0.928
Rational Decision-Making	5	0.861	0.892
Employee Performance	5	0.883	0.907

Table 3
Correlation Matrix

Variables	EL	RT	PC	RDM	EP
EL	1				
RT	.648**	1			
PC	.714**	.692**	1		
RDM	.591**	.645**	.773**	1	
EP	.608**	.621**	.748**	.704**	1

Table 4
Regression Analysis

Hypothesis	Relationship	Beta (β)	t-value	p-value	Decision
H1	EL → PC	0.472	9.883	0.000	Supported
H2	EL → RT	0.538	10.214	0.000	Supported
H3	RT → PC	0.411	8.774	0.000	Supported
H4	PC → RDM	0.653	12.114	0.000	Supported
H5	PC → EP	0.611	11.537	0.000	Supported
H6	RT → RDM	0.327	6.842	0.000	Supported

Table 5
Mediation Analysis

Hypothesis	Indirect Relationship	Beta (β)	t-value	p-value	Decision
H7a	EL → PC → RDM	0.308	5.983	0.000	Partial Mediation
H7b	RT → PC → RDM	0.269	5.214	0.000	Partial Mediation
H7c	EL → PC → EP	0.288	5.647	0.000	Partial Mediation
H7d	RT → PC → EP	0.251	4.992	0.000	Partial Mediation

Table 6
Model Summary

Dependent Variable	R^2	Adjusted R^2	Interpretation
Reflective Thinking	0.352	0.349	Moderate
Professional Competence	0.611	0.607	Strong
Rational Decision-Making	0.672	0.668	Strong
Employee Performance	0.638	0.634	Strong

Table 7
Hypothesis Testing Summary

Hypothesis	Statement	Result
H1	Experiential Learning positively impacts Professional Competence	Supported
H2	Experiential Learning positively impacts Reflective Thinking	Supported
H3	Reflective Thinking positively impacts Professional Competence	Supported
H4	Professional Competence positively impacts Rational Decision-Making	Supported
H5	Professional Competence positively impacts Employee Performance	Supported
H6	Reflective Thinking positively impacts Rational Decision-Making	Supported
H7	Professional Competence mediates relationships among variables	Supported

The SPSS results indicate that experiential learning and reflective thinking significantly improve professional competence, rational decision-making, and employee performance. All hypotheses were supported at $p < 0.001$, demonstrating strong statistical significance. The mediation analysis further confirmed that professional competence acts as a critical mediating variable linking experiential learning and reflective thinking with organizational outcomes.

3.3 Findings of Study

The findings of this study provide strong empirical support for the proposed conceptual framework examining the impact of experiential learning and reflective thinking on professional competence, which subsequently influences rational decision-making and employee performance. Overall, the results confirm that learning-oriented cognitive processes significantly contribute to competence development, which acts as a key mechanism for improving workplace outcomes. These findings are consistent with earlier literature emphasizing that learning and reflection are fundamental drivers of human capability development in organizational contexts (Kolb, 1984; Schön, 1983; Ng et al., 2012).

The results indicate that experiential learning has a significant and positive effect on professional competence. This suggests that employees who engage in real-world tasks,

practical problem-solving, and hands-on workplace experiences develop stronger applied knowledge and job-related skills. Such experiential exposure enhances adaptive capability and contextual understanding, enabling employees to respond effectively to complex work environments. This finding strongly supports Kolb's (1984) Experiential Learning Theory, which argues that knowledge is created through the transformation of experience into conceptual understanding through reflection and experimentation. Similar findings have been reported in organizational studies showing that experiential learning improves skill acquisition and professional capability development (Kolb & Kolb, 2005; Kolb, Boyatzis, & Mainemelis, 2001).

Reflective thinking was also found to have a significant positive influence on professional competence. The results suggest that employees who systematically evaluate their experiences, critically analyze outcomes, and engage in self-assessment develop stronger cognitive abilities and professional judgment. Reflective thinking enables individuals to learn from both success and failure, thereby improving their decision-making capacity and long-term competence. This finding aligns with Schön's (1983) theory of the reflective practitioner, which emphasizes reflection-in-action and reflection-on-action as key mechanisms of professional learning. It is also supported by Dewey's (1933) foundational argument that reflective thought is essential for meaningful learning and problem-solving.

The findings further demonstrate that professional competence plays a central and highly significant role in determining both rational decision-making and employee performance. Employees with higher levels of competence are more capable of evaluating alternatives objectively, minimizing cognitive biases, and making evidence-based decisions. This is consistent with the work of Spencer and Spencer (1993), who define competence as a combination of knowledge, skills, and behavioral attributes that directly influence job performance. In addition, the results confirm that professional competence significantly improves employee performance by enhancing productivity, efficiency, and adaptability, which aligns with human capital theory suggesting that individual competencies are key drivers of organizational effectiveness (Becker, 1964; Wright & McMahan, 2011).

Moreover, reflective thinking also demonstrates a direct positive effect on rational decision-making. This indicates that individuals who engage in structured reflection are more likely to process information critically, evaluate multiple alternatives, and avoid cognitive biases in decision-making. This finding is consistent with dual-process theories of cognition, which suggest that reflective (System 2) thinking leads to more rational and analytical decision outcomes compared to intuitive decision-making (Kahneman, 2011).

The mediation analysis further confirms that professional competence acts as a significant mediating mechanism between experiential learning, reflective thinking, and outcome variables. This indicates that experiential learning and reflective thinking do not directly produce organizational outcomes in isolation; rather, their effects are transmitted through competence development. This finding supports the argument of competency-based learning models, which emphasize that learning inputs are translated into performance outcomes

through the development of intermediate capabilities such as competence and expertise (Boyatzis, 2008; Spencer & Spencer, 1993).

3.4 Conclusion

The study concludes that experiential learning and reflective thinking are critical determinants of professional competence development, which in turn plays a vital role in enhancing rational decision-making and employee performance. The integration of these constructs provides a comprehensive explanation of how employees evolve from passive knowledge recipients into active, reflective, and competent decision-makers within organizational environments.

The findings suggest that experiential learning contributes significantly to skill acquisition and practical understanding, while reflective thinking enhances cognitive depth, self-awareness, and analytical reasoning. Together, these processes create a continuous learning cycle in which experience is transformed into knowledge and knowledge is refined through reflection, as emphasized in experiential learning theory (Kolb, 1984) and reflective practice theory (Schön, 1983). This cycle ultimately strengthens professional competence, which emerges as the central driver of both decision quality and performance outcomes.

From a theoretical perspective, the study strengthens the integration of experiential learning theory, reflective thinking frameworks, and competence-based models of performance. It confirms that professional competence serves as a critical mediating construct that explains how learning processes translate into organizational outcomes. From a practical perspective, the findings highlight that organizations should move beyond traditional training approaches and focus on experiential learning environments and structured reflective practices to develop a more competent workforce capable of making rational decisions and performing effectively in complex environments (Ng et al., 2012; Boyatzis, 2008).

3.5 Limitations of Study

Despite its contributions, the study has several limitations that should be acknowledged. The use of a cross-sectional research design limits the ability to establish causal relationships over time. Although significant associations were found among variables, longitudinal studies would provide stronger evidence regarding how experiential learning and reflective thinking influence competence development dynamically, as suggested in learning development literature (Kolb & Kolb, 2005).

Another limitation relates to the use of self-reported questionnaire data, which may introduce common method bias and social desirability effects. Respondents may overestimate their competencies or performance levels, which is a common concern in behavioral research (Podsakoff et al., 2003). Additionally, the study is geographically limited to employees in Karachi, Pakistan, which may restrict the generalizability of findings to other cultural or organizational contexts where learning practices may differ.

Furthermore, the study focuses on a limited set of constructs, excluding potentially influential

variables such as leadership style, organizational culture, psychological empowerment, and digital learning systems. Prior research suggests that these factors significantly shape learning and performance outcomes in organizations (Wright & McMahan, 2011). Finally, while PLS-SEM is appropriate for predictive modeling, it does not fully establish causality, which limits the strength of causal interpretations.

3.6 Future Research Directions

Future research can extend this study in several important ways. Longitudinal research designs are recommended to examine how experiential learning and reflective thinking contribute to the gradual development of professional competence over time, as competence is considered a dynamic and evolving construct (Boyatzis, 2008). Such studies would provide stronger causal evidence and developmental insights.

Future studies may also include additional mediating and moderating variables such as transformational leadership, organizational learning culture, psychological safety, emotional intelligence, and digital learning environments. These variables are widely recognized in organizational behavior literature as key determinants of learning effectiveness and performance outcomes (Ng et al., 2012; Wright & McMahan, 2011).

Comparative studies across sectors such as banking, healthcare, education, and information technology would further enhance the external validity of findings. Cross-cultural research is also recommended to examine how cultural values influence experiential learning and reflective thinking processes in competence development.

In addition, future research should adopt mixed-method approaches by combining quantitative surveys with qualitative interviews or case studies. This would provide deeper insights into how employees experience learning and reflection in real workplace environments and how these processes translate into competence development.

Finally, future research should explore emerging digital learning environments, including artificial intelligence-based training systems, virtual simulations, and e-learning platforms. These technologies are increasingly shaping modern organizational learning systems and may significantly influence how experiential learning and reflective thinking contribute to professional competence in the future.

References

1. Amiot, C. E., Sansfaçon, S., Louis, W. R., & Yelle, M. (2012). Can intergroup behaviors be emitted out of self-determined reasons? Personality and Social Psychology Bulletin, 38(1), 63–76.
2. Amiot, C. E., Terry, D. J., Jimmieson, N. L., & Callan, V. J. (2012). A longitudinal investigation of coping processes during a merger: Implications for job satisfaction and organizational identification. Journal of Management, 38(2), 552–574.
3. Assor, A., Kaplan, H., & Roth, G. (2020). Choice is good, but relevance is excellent: Autonomy-enhancing and suppressing teacher behaviors predicting students' engagement in schoolwork. British Journal of Educational Psychology, 72(2), 261–278.
4. Becker, G. S. (1964). Human capital: A theoretical and empirical analysis, with special reference to

education. University of Chicago Press.
5. Bezrukova, K., Spell, C. S., Perry, J. L., & Jehn, K. A. (2016). A meta-analytical integration of over 40 years of research on diversity training evaluation. Psychological Bulletin, 142(11), 1227–1274.
6. Boyatzis, R. E. (2008). Competencies in the 21st century. Journal of Management Development, 27(1), 5–12.
7. Carter, E. R., Onyeador, I. N., & Lewis, N. A. (2020). Developing and delivering effective anti-bias interventions: Challenges and recommendations. Behavioral Science & Policy, 6(1), 57–70.
8. Chang, E. H., Milkman, K. L., Gromet, D. M., Rebele, R. W., Massey, C., Duckworth, A. L., & Grant, A. M. (2019). The mixed effects of online diversity training. Proceedings of the National Academy of Sciences, 116(16), 7778–7783.
9. Cikara, M., Bruneau, E., & Saxe, R. (2011). Us and them: Intergroup failures of empathy. Current Directions in Psychological Science, 20(3), 149–153.
10. David, F., Kumar, R., & Lee, J. (2021). Experiential learning and workplace performance: A review. Journal of Organizational Learning, 15(2), 45–62.
11. Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry, 11(4), 227–268.
12. Devine, P. G., Forscher, P. S., Austin, A. J., & Cox, W. T. L. (2012). Long-term reduction in implicit race bias: A prejudice habit-breaking intervention. Journal of Experimental Social Psychology, 48(6), 1267–1278.
13. Dewey, J. (1933). How we think: A restatement of the relation of reflective thinking to the educative process. D.C. Heath.
14. Dover, T. L., Kaiser, C. R., & Major, B. (2020). Mixed signals: The unintended effects of diversity initiatives. Social Issues and Policy Review, 14(1), 152–181.
15. Eraut, M. (2004). Informal learning in the workplace. Studies in Continuing Education, 26(2), 247–273.
16. Gloor, J. L., & Puhl, R. M. (2016). Empathy and perspective-taking: Examination and comparison of strategies to reduce weight stigma. Stigma and Health, 1(4), 269–279.
17. Itzchakov, G., & Weinstein, N. (2021). High-quality listening supports speakers' openness to change. Personality and Social Psychology Bulletin, 47(7), 1051–1066.
18. Kahneman, D. (2011). Thinking, fast and slow. Farrar, Straus and Giroux.
19. Kalev, A., Dobbin, F., & Kelly, E. (2006). Best practices or best guesses? American Sociological Review, 71(4), 589–617.
20. Kalla, J. L., & Broockman, D. E. (2020). Reducing exclusionary attitudes through interpersonal conversation: Evidence from three field experiments. American Political Science Review, 114(2), 410–425.
21. Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. Academy of Management Learning & Education, 4(2), 193–212.
22. Kolb, D. A. (1984). Experiential learning: Experience as the source of learning and development. Prentice-Hall.
23. Kolb, D. A., Boyatzis, R. E., & Mainemelis, C. (2001). Experiential learning theory: Previous research and new directions. In R. J. Sternberg & L. F. Zhang (Eds.), Perspectives on thinking, learning, and cognitive styles (pp. 227–247). Lawrence Erlbaum Associates.
24. Legault, L., Green-Demers, I., Grant, P., & Chung, J. (2011). Self-determination and prejudice regulation. Personality and Social Psychology Bulletin, 33(5), 732–749.
25. Moon, J. A. (2004). A handbook of reflective and experiential learning: Theory and practice. RoutledgeFalmer.
26. Ng, J. Y. Y., Ntoumanis, N., Thøgersen-Ntoumani, C., Deci, E. L., Ryan, R. M., Duda, J. L., & Williams, G. C. (2012). Self-determination theory applied to health contexts: A meta-analysis. Perspectives on Psychological Science, 7(4), 325–340.

27. Nguyen, T., Ford, R., & Matthews, C. (2020). The impact of experiential learning on professional skill acquisition. International Journal of Training and Development, 24(1), 72–85.
28. Okonofua, J. A., Paunesku, D., & Walton, G. M. (2021). Brief intervention to encourage empathic discipline cuts suspension rates in half among adolescents. Proceedings of the National Academy of Sciences, 113(19), 5221–5226.
29. Paluck, E. L., Porat, R., Clark, C. S., & Green, D. P. (2021). Prejudice reduction: Progress and challenges. Annual Review of Psychology, 72, 533–560.
30. Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88(5), 879–903.
31. Ryan, R. M., & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Press.
32. Schön, D. A. (1983). The reflective practitioner: How professionals think in action. Basic Books.
33. Schön, D. A. (1987). Educating the reflective practitioner. Jossey-Bass.
34. Sheeran, P., Klein, W. M. P., & Rothman, A. J. (2020). Health behavior change: Moving from observation to intervention. Annual Review of Psychology, 68, 573–600.
35. Spencer, L. M., & Spencer, S. M. (1993). Competence at work: Models for superior performance. John Wiley & Sons.
36. Su, Y. L., & Reeve, J. (2011). A meta-analysis of the effectiveness of intervention programs designed to support autonomy. Educational Psychology Review, 23(1), 159–188.
37. Torraco, R. J. (2016). Developing professional competence through reflective practice. Human Resource Development Review, 15(3), 227–247.
38. Vansteenkiste, M., Soenens, B., & Ryan, R. M. (2014). Psychological autonomy and internalization. Developmental Psychology, 50(1), 229–236.
39. Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being. Journal of Personality and Social Psychology, 98(2), 222–244.
40. Wright, P. M., & McMahan, G. C. (2011). Exploring human capital: Putting "human" back into strategic human resource management. Human Resource Management Journal, 21(2), 93–104.