From Action to Judgement: Experiential Learning Processes in a Business Simulation Environment

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Abstract: This study examines how postgraduate students develop decision-making capability through experiential learning processes within a business simulation environment. While simulation-based learning is widely used in business education, there is limited empirical insight into how learners internalise decision-making through experience, feedback, and consequence. This research focuses on student-reported learning processes rather than performance outcomes, providing insight into how judgement develops through repeated decision cycles. The study draws on survey data collected from master's students enrolled in an 18-credit business analytics simulation module incorporating SimVenture Evolution. The survey captured quantitative measures relating to perceived realism, confidence in decision-making, preparedness for complex business challenges, risk-taking orientation, and perceived development of judgement, complemented by open-ended responses. Findings indicate that students experienced the simulation as a realistic and demanding decision environment requiring trade-offs under uncertainty. Quantitative results show increased confidence and preparedness, while qualitative analysis highlights a learning process characterised by action, feedback, and visible consequences. Students consistently reported that learning emerged from observing the outcomes of their own decisions, with both successful and unsuccessful outcomes prompting reflection and adaptation. The iterative structure of the simulation enabled learners to refine their strategies across successive decision cycles. The study contributes empirical insight into how experiential learning processes operate in simulation environments and demonstrates how consequence, iteration, and reflection support the development of judgement in complex, uncertain decision environments.

1. Introduction

Developing decision-making capability is a central objective of contemporary business and management education. Graduates are increasingly expected not only to possess disciplinary knowledge, but also to demonstrate the ability to make informed judgements under conditions of uncertainty, complexity, and incomplete information. Traditional pedagogical approaches, which emphasise content transmission and the acquisition of procedural knowledge, have been criticised for their limited effectiveness in developing such capabilities.

In response, there has been growing emphasis on experiential learning approaches that position learners as active participants in decision-making contexts. Experiential learning is widely understood as a process through which knowledge is created through the transformation of experience (Kolb, 1984). Within business education, simulation-based learning has emerged as a prominent form of experiential pedagogy, offering learners opportunities to engage in complex, dynamic decision environments (Salas, Wildman and Piccolo, 2009; Sitzmann, 2011). In particular, digital simulation environments represent a form of technology-mediated learning that enables learners to engage with complex, dynamic decision contexts in ways that are difficult to replicate through traditional instructional approaches.

Despite the widespread adoption of simulations, much of the existing literature focuses on engagement, satisfaction, or learning outcomes, rather than the underlying processes through which learning occurs. Recent studies suggest that while simulations can enhance learning outcomes, there remains limited empirical insight into how learners interpret feedback, respond to consequences, and develop judgement over time (Eckhaus et al., 2017; Villarroel et al., 2020).

This study addresses this gap by examining how postgraduate students experience learning within a business simulation environment. Rather than focusing on performance metrics, the research investigates student-reported learning processes, with particular attention to the role of action, feedback, and consequence in shaping decision-making capability. This study therefore contributes by providing empirical insight into how experiential learning processes operate within simulation environments, with particular attention to the development of judgement through consequence and iteration.

2. Literature Review

The literature review adopts a narrative approach to synthesise research relating to experiential learning, simulation-based learning, and judgement development in higher education. The review draws on foundational theoretical contributions and contemporary empirical studies relevant to the study's focus.

2.1 Experiential Learning and Capability Development

Experiential learning theory conceptualises learning as a cyclical process involving concrete experience, reflective observation, abstract conceptualisation, and active experimentation (Kolb, 1984). This cycle emphasises that learning emerges through the transformation of experience, rather than through passive absorption of information. Subsequent work has extended this perspective by highlighting the importance of learning environments in supporting experiential processes. Kolb and Kolb (2005) argue that effective learning requires environments that enable learners to engage actively with tasks, reflect on their experiences, and apply insights in new contexts.

Recent research continues to demonstrate the relevance of experiential learning in higher education. Experiential approaches have been shown to support the development of critical thinking, problem-solving, and decision-making capabilities, particularly in complex and uncertain environments (Jones-Roberts and Bechtold, 2024). However, systematic reviews suggest that experiential learning is often only partially implemented, with limited attention to the full cycle of action, feedback, and reflection (Villarroel et al., 2020).

2.2 Simulation-Based Learning in Business Education

Simulation-based learning provides a structured environment in which learners can engage with complex decision-making scenarios (O'Brien and Costin, 2023; O'Brien et al., 2025). These environments enable students to experiment with decisions, observe outcomes, and explore the consequences of strategic choices in a risk-free setting (Salas, Wildman and Piccolo, 2009). Meta-analytic evidence suggests that simulation-based training can be highly effective in developing applied skills and improving learning outcomes (Sitzmann, 2011). In business education, simulations are particularly valued for their ability to integrate multiple functional areas and expose learners to dynamic, interdependent systems (Heyworth-Thomas, 2023). More recent work highlights the importance of feedback and reflection in enhancing the effectiveness of simulation-based learning. Structured reflection processes, such as debriefing, have been shown to support deeper learning by helping students interpret and internalise their experiences (Kumar et al., 2025). Despite these insights, much of the literature remains focused on outcomes rather than processes. There is limited understanding of how learners interpret simulation experiences, particularly in relation to feedback, uncertainty, and iterative decision-making.

2.3 Learning through Consequence and Iteration

A defining feature of simulation-based learning is the ability to experience the consequences of decisions (O'Brien and Costin, 2023; O'Brien et al., 2025). Unlike traditional instructional approaches, simulations provide immediate and visible feedback, allowing learners to observe the impact of their actions.

Research suggests that learning through consequence is central to the effectiveness of simulations. Students develop understanding by observing outcomes, particularly when those outcomes challenge expectations and highlight discrepancies between intended and actual performance (Hattie and Timperley, 2007). This aligns with broader constructivist perspectives, which emphasise active engagement and reflection in knowledge construction. Iteration also plays a critical role in this process. Repeated cycles of decision-making enable learners to refine their understanding, recognise patterns, and develop more sophisticated strategies. However, empirical research examining how iteration contributes to learning remains limited.

2.4 Research Gap

While existing literature highlights the importance of experiential learning and simulation-based education, there remains a lack of empirical insight into how learning processes unfold within simulation environments. This study addresses this gap by examining how learners experience and interpret decision-making, feedback, and outcomes.

3. Teaching Context

The study was conducted within a postgraduate business analytics module delivered at an Irish university. The module is an 18-credit component of a master's programme and is designed to provide students with an applied understanding of business decision-making in a simulated environment. The module incorporates the SimVenture Evolution simulation, in which students operate a virtual company and make decisions across multiple functional areas, including marketing, operations, finance, and strategy. Students work in teams and participate in multiple decision rounds, each representing a discrete period of business activity.

The simulation is designed to create a dynamic and uncertain decision environment. Decisions made in one round influence outcomes in subsequent rounds, requiring learners to continuously reassess their strategies. Feedback is provided through performance metrics and system-generated reports, allowing students to observe the consequences of their decisions.

4. Methodology

This study adopted a mixed-methods research design combining quantitative survey data with qualitative thematic analysis. This approach was considered appropriate because the study sought both to identify patterns in students' perceptions of learning and to explore how learners interpreted their experiences, capturing both the distribution of learner perceptions and the processes through which those perceptions were formed (Creswell and Plano Clark, 2018). The study was informed by a pragmatic research perspective, which prioritises the use of methods most appropriate to addressing the research question (Creswell and Creswell, 2018). Quantitative survey items provided insight into students' perceptions of realism, confidence, preparedness, and judgement development, while qualitative responses enabled exploration of the mechanisms through which learning occurred.

4.1 Data Collection

Data were collected from postgraduate students participating in the simulation-based module incorporating SimVenture Evolution. The survey was administered at the conclusion of the simulation activity, ensuring that responses reflected students' full experience of the decision-making process. The instrument included Likert-scale items designed to measure key dimensions of the learning experience, including perceived realism, engagement, confidence in decision-making, preparedness to address complex business challenges, risk-taking orientation, and perceived development of judgement. These items provided an overview of how students evaluated the simulation as a learning environment. In addition, open-ended questions were included to capture qualitative insights into how students experienced decision-making within the simulation. These responses focused on perceptions of uncertainty, the role of feedback and outcomes, and how students adapted their strategies over time.

A total of 33 responses were collected.

4.2 Data Analysis

Quantitative data were analysed using descriptive statistics to identify overall patterns in student responses across the survey items. Frequencies and levels of agreement were examined to provide an indication of how students perceived the simulation experience and its contribution to decision-making capability. Given the exploratory nature of the study and the relatively small cohort size, the quantitative analysis was used primarily to identify broad trends and support interpretation of the qualitative findings.

Qualitative responses were analysed using an inductive thematic analysis approach (Braun and Clarke, 2006, 2022). Thematic analysis was selected because it provides a flexible and systematic method for identifying patterns of meaning within qualitative datasets. Responses were reviewed repeatedly to achieve familiarity with the data before inductive coding was undertaken. Related codes were subsequently grouped into broader themes relating to consequence, feedback, reflection, and iteration. These themes emerged through iterative comparison of participant responses and were subsequently refined to ensure they accurately reflected the dataset. To enhance trustworthiness, themes were reviewed against the original dataset to ensure consistency between participant responses and thematic interpretations.

The combination of quantitative and qualitative data enabled a more comprehensive understanding of the learning experience, allowing patterns in student perceptions to be interpreted alongside detailed accounts of how those perceptions were formed.

5. Findings

5.1 Perceived Realism and Decision Complexity

Students consistently described the simulation as providing a realistic and demanding decision-making environment. Quantitative responses indicated consistently high levels of agreement regarding the realism of the simulation, with over 80% of students selecting 'agree' or 'strongly agree' across related items.

Qualitative responses provide further insight into how this realism was experienced. Students frequently referred to the interconnected nature of decisions, noting that choices made in one functional area (e.g. pricing or marketing) had implications for other aspects of the business, such as cash flow, staffing, or production capacity. This interdependence contributed to a perception of complexity that extended beyond isolated decision tasks.

A recurring theme in the data was the challenge of making decisions without complete information. Students highlighted the difficulty of predicting outcomes and described a sense of uncertainty that required them to move beyond formulaic approaches. Rather than applying predefined solutions, learners reported needing to interpret available data, make assumptions, and accept the possibility of unintended consequences. This suggests that the simulation successfully created a context in which decision-making was experienced as uncertain, contingent, and context-dependent. Importantly, realism was not only associated with the structure of the simulation but also with the consequences of decisions. Students emphasised that outcomes felt meaningful, particularly when poor decisions resulted in visible negative impacts on performance. This reinforced the perception that decisions carried weight, contributing to a more engaged and reflective learning experience.

5.2 Development of Confidence and Decision-Making Capability

Quantitative findings indicate that participation in the simulation was associated with increased confidence in decision-making. A clear majority of respondents (over 80%) reported increased confidence, with responses strongly concentrated in the 'agree' and 'strongly agree' categories. Students also reported greater willingness to engage with risk, although responses in this area exhibited slightly greater variation, suggesting that comfort with uncertainty developed unevenly across the cohort.

Qualitative data suggest that this increase in confidence was not simply a result of familiarity with the simulation interface, but rather emerged from repeated engagement with decision-making tasks. Students described an initial period of uncertainty and hesitation, followed by a gradual increase in confidence as they gained experience with the consequences of their decisions.

Several responses highlighted that confidence developed through exposure to both successful and unsuccessful outcomes. Early mistakes were often described as challenging, but also as important learning moments that contributed to improved decision-making in later rounds. As students progressed through the simulation, they reported becoming more comfortable making decisions under uncertainty and more willing to take calculated risks. This suggests that confidence was not derived from success alone, but from the process of engaging with decision-making over time. The iterative structure of the simulation allowed students to test their assumptions, learn from outcomes, and refine their approach, contributing to a more robust sense of perceived capability.

5.3 Learning through Consequences of Decisions

A central finding of the study is the importance of learning through the consequences of decisions. Students consistently emphasised that observing the outcomes of their actions was the primary mechanism through which learning occurred.

Quantitative responses indicate that students perceived a strong link between their decisions and subsequent outcomes, with the majority indicating agreement that outcomes reflected their strategic choices. This perception of causality appears to be critical, as it enabled learners to connect their actions with results in a meaningful way.

Qualitative responses reinforce this finding. Students frequently described learning as emerging from seeing "what happened" after making decisions, particularly when outcomes deviated from expectations. Negative outcomes were often highlighted as especially impactful, prompting learners to reconsider their assumptions and approach.

Importantly, students did not attribute learning primarily to instruction, feedback from instructors, or external guidance. Instead, they emphasised the role of experiencing consequences directly. This suggests that the simulation functioned as an environment in which learners could generate their own feedback through action, rather than relying solely on external evaluation. This finding highlights the importance of consequence visibility in simulation design. When learners are able to clearly see the outcomes of their decisions, they are more likely to engage in reflection and develop a deeper understanding of cause-and-effect relationships.

5.4 Iterative Decision-Making and Strategy Refinement

The iterative structure of the simulation emerged as a key factor supporting learning. Students engaged in multiple rounds of decision-making, allowing them to test strategies, observe outcomes, and adjust their approach over time. Most respondents (approximately three-quarters of the cohort) indicated that repeated decision cycles supported their learning.

Qualitative responses provide a more detailed picture of how iteration contributed to learning. Students described a process in which initial decisions were often exploratory or uncertain, followed by increasing levels of intentionality as they gained experience. Early rounds were characterised by trial-and-error, while later rounds involved more deliberate and informed decision-making.

Learners also reported becoming more aware of patterns and interdependencies over time. Through repeated exposure to decision–outcome relationships, students developed a more nuanced understanding of how different variables interacted. This enabled them to anticipate potential consequences and make more strategic decisions in subsequent rounds. The temporal dimension of learning was particularly evident in student reflections. Many participants emphasised that understanding developed gradually, rather than immediately. The opportunity to revisit decisions, observe longer-term outcomes, and refine strategies was seen as essential to the learning process.

5.5 Reflection, Feedback, and Adaptation

Reflection emerged as a critical component of the learning process, closely linked to feedback and outcome visibility. Students described engaging in both individual and group reflection following each decision round, using outcomes to evaluate their performance and inform future decisions.

Quantitative responses indicate that students valued the feedback provided by the simulation, particularly in terms of its immediacy and clarity, with the majority reporting that feedback helped them understand the impact of their decisions. Qualitative data suggest that reflection was often triggered by unexpected or undesirable outcomes. When results did not align with expectations, students reported being prompted to reconsider their assumptions and analyse their decision-making process. This reflective activity frequently led to adjustments in strategy, demonstrating a clear link between feedback, reflection, and adaptation.

Students also highlighted the role of team discussions in facilitating reflection. Collaborative analysis of outcomes allowed learners to share perspectives, challenge assumptions, and develop a more comprehensive understanding of the situation. This suggests that reflection was both an individual and social process, contributing to deeper learning. Importantly, reflection was not limited to correcting mistakes. Positive outcomes also prompted reflection, with students seeking to understand why certain strategies were successful. This indicates that reflection operated as a continuous process, supporting both reinforcement and revision of decision-making approaches.

5.6 Synthesis of Learning Process

Taken together, the findings suggest a coherent experiential learning process characterised by the interaction of action, feedback, reflection, and adaptation. Students engaged in cycles of decision-making in which each stage informed the next, contributing to the development of judgement over time. This process can be understood as a dynamic sequence: learners make decisions, observe outcomes, reflect on those outcomes, and adjust their approach in subsequent iterations. The visibility of consequences and the opportunity for repeated

engagement appear to be critical factors enabling this process. Rather than learning through instruction alone, students developed understanding through direct engagement with decision-making and its consequences. The simulation provided a structured environment in which learners could experience responsibility for decisions, encounter the effects of those decisions, and refine their approach through iterative cycles.

This synthesis highlights the importance of designing learning environments that support not only action, but also meaningful feedback, reflection, and iteration. It is the interaction of these elements, rather than any single component, that appears to underpin the development of decision-making capability.

6. Discussion

6.1 Experiential Learning as a Process, Not a Pedagogical Label

A key contribution of this study is the identification of experiential learning as a *processual phenomenon* rather than a pedagogical label. Although simulation-based learning is frequently described as "experiential", the findings suggest that experiential learning does not arise automatically from the use of simulation technology. Instead, it emerges through a specific sequence of learner activities: making decisions, observing outcomes, reflecting on those outcomes, and adapting subsequent behaviour.

This aligns with the cyclical model of experiential learning proposed by Kolb (1984), but the present study extends this perspective by evidencing how learners themselves experience and articulate this cycle. Importantly, the data indicate that students do not consciously move through formal stages of experiential learning. Rather, the process is enacted through engagement with the simulation, with reflection and adaptation triggered by the visibility and impact of decision outcomes. This suggests that experiential learning in simulation contexts is less about structured pedagogical stages and more about the *conditions* that enable learners to engage in iterative cycles of action and reflection. In this sense, the findings reinforce the argument that effective experiential learning depends on the design of the learning environment, rather than on the nominal use of experiential methods.

6.2 The Central Role of Consequence in Learning

One of the most significant findings of this study is the central role of consequence in shaping learning. Students consistently reported that learning occurred through observing the outcomes of their decisions, particularly when those outcomes differed from expectations. This highlights consequence as a key mechanism through which learners make sense of their actions and develop understanding.

Prior research has emphasised the importance of structured reflection and debriefing in simulation-based learning (Kumar et al., 2025), while feedback more broadly is recognised as one of the most powerful influences on learning (Hattie and Timperley, 2007). The findings of this study suggest that what matters is not simply the presence of feedback, but its perceived authenticity and causal linkage to learner actions. Students interpreted outcomes as meaningful because they were understood as direct consequences of their own decisions rather than externally imposed evaluations.

Simulation environments therefore provide a distinctive learning context in which learners generate feedback through action. This creates opportunities to develop a deeper understanding of cause-and-effect relationships and encourages greater ownership of learning. The findings suggest that the effectiveness of simulation-based learning depends not only on providing feedback, but on ensuring that outcomes are visible, meaningful, and clearly connected to learner decisions.

6.3 Iteration and the Temporal Dimension of Learning

The study highlights iteration as a core mechanism of experiential learning. Students did not develop decision-making capability through isolated experiences, but through repeated cycles of action, feedback, and reflection. Through successive decision rounds, learners became more confident, recognised patterns in outcomes, and refined their strategies over time.

The findings suggest that experiential learning is inherently temporal. Understanding developed gradually as students tested assumptions, observed consequences, and adapted their approach. The sequencing of decision rounds and the persistence of consequences across those rounds were therefore not simply features of the simulation design but important pedagogical mechanisms that supported learning. This suggests that the value

of simulation-based learning lies not only in providing realistic decision environments, but in enabling sustained cycles of experimentation, consequence, and adaptation.

6.4 Learning from Failure and the Productive Role of Error

An important insight emerging from the findings is the constructive role of failure in learning. Students frequently described negative outcomes as particularly valuable learning experiences, as they prompted reflection and reconsideration of assumptions. This supports the view that error and failure are integral to experiential learning, rather than outcomes to be avoided.

In traditional educational settings, failure is often minimised or penalised, which can discourage risk-taking and experimentation. In contrast, the simulation environment allowed students to experience failure without real-world consequences, creating a safe space for exploration and learning. This aligns with research suggesting that simulations can support learning by allowing learners to engage with risk and uncertainty in a controlled environment (Sitzmann, 2011).

However, the findings also suggest that failure alone is not sufficient to support learning. It is the combination of failure with visible consequences and opportunities for iteration that enables learners to reflect and adapt. Without these elements, failure may not translate into meaningful learning. This highlights the importance of designing learning environments that not only allow for failure, but also support learners in interpreting and responding to it. In this study, the immediacy of feedback and the opportunity to apply revised strategies in subsequent rounds appear to have been critical in transforming failure into learning.

6.5 From Decision-Making to Judgement Development

While much of the literature on business education focuses on decision-making as a skill, the findings of this study suggest that simulation-based learning supports the development of *judgement* rather than simply decision-making techniques. Students did not merely learn how to make decisions; they developed a more nuanced understanding of when and how to make decisions in complex and uncertain contexts. This distinction is important. Decision-making can be understood as the application of tools or frameworks, whereas judgement involves the ability to interpret situations, evaluate trade-offs, and make contextually appropriate decisions. The findings indicate that judgement develops through experience, particularly through engagement with uncertainty and consequence.

Students reported becoming more aware of interdependencies, recognising patterns in outcomes, and adapting their strategies accordingly. These behaviours are indicative of developing judgement, rather than simply applying predefined rules. This suggests that simulation-based learning can support higher-order learning outcomes that are difficult to achieve through traditional instructional approaches.

6.6 Contribution to Research and Practice

This study makes several contributions to the literature on experiential learning and simulation-based education. First, it provides empirical evidence of how experiential learning processes operate in a business simulation context, addressing a gap identified in recent reviews (Villarroel et al., 2020). Rather than simply applying experiential learning theory, the study offers insight into how specific mechanisms – particularly consequence visibility, iterative decision cycles, and reflection – interact in practice to support the development of judgement.

Second, the findings extend existing work on simulation-based learning by shifting the focus from outcomes such as engagement or performance to the underlying processes through which learning occurs. The results demonstrate that learning is not an automatic outcome of simulation use, but emerges through structured interaction with decision-making, feedback, and consequence over time.

From a practical perspective, the study highlights that the effectiveness of simulation-based learning depends on the design of the learning environment. Specifically, simulations should be structured to:

- Make consequences visible and meaningful
- Support iterative decision-making over time
- Encourage reflection through feedback and discussion
- Allow for failure as part of the learning process

By foregrounding these elements, educators can move beyond using simulations as engagement tools and instead leverage them as environments for developing judgement and decision-making capability.

7. Implications for Practice

The findings suggest that the effectiveness of simulation-based learning depends less on the use of simulation technology itself and more on how the learning environment is designed to support experiential learning processes. In particular, consequence, iteration, and reflection emerged as key mechanisms underpinning learning. Simulations should make the consequences of decisions visible and meaningfully linked to learner actions, allowing students to observe cause-and-effect relationships and reflect on outcomes. Learning is further strengthened through repeated decision cycles that enable learners to test assumptions, refine strategies, and build confidence over time.

The findings also highlight the importance of structured opportunities for reflection, both individually and collaboratively. Educators play an important role in facilitating interpretation of outcomes rather than providing solutions. Finally, simulation environments should allow learners to experience productive failure and adapt their approach in subsequent rounds.

Overall, the study suggests that simulation-based learning can support the development of judgement when learning environments are deliberately designed to foreground consequence, iteration, and reflection.

8. Limitations and Future Research

This study provides insight into experiential learning processes within a business simulation environment; however, several limitations should be acknowledged. First, the study is based on self-reported data, which reflects students' perceptions of their learning rather than direct measures of decision-making performance. While these perceptions are valuable in understanding how learners interpret their experiences, they may be subject to bias. In particular, self-reported data does not provide direct evidence of behavioural change in decision-making capability, which represents an important avenue for future research.

Second, the study is situated within a single module and institutional context. Although the findings are consistent with broader experiential learning theory, their generalisability to other disciplines, levels of study, or simulation designs may be limited. Differences in cohort characteristics, facilitation approaches, and simulation structures could influence how learning processes unfold.

Third, the analysis focuses on learning within the timeframe of the simulation. While students reported increased confidence and perceived capability, the study does not examine whether these effects persist over time or transfer to real-world decision-making contexts.

These limitations suggest several directions for future research. Longitudinal studies could examine how decision-making capability develops beyond the simulation and whether learning is retained over time. Further research could incorporate behavioural or performance-based measures to complement self-reported data and provide a more robust assessment of learning outcomes. In addition, comparative studies across different simulation designs or pedagogical approaches would help identify which features most effectively support experiential learning processes. Overall, while the findings should be interpreted within the context of these limitations, they provide a strong foundation for further investigation into how experiential learning environments can be designed to support the development of judgement and decision-making capability.

9. Conclusion

This study set out to examine how decision-making capability develops within a business simulation environment, with a particular focus on experiential learning processes. The findings demonstrate that learning in this context is not primarily driven by instruction or content delivery, but by structured engagement with decision-making, consequence, and iteration. Students developed capability through repeated cycles of action, feedback, reflection, and adaptation, rather than through the application of predefined models or techniques.

The study contributes to the literature by providing empirical evidence of how experiential learning processes unfold in practice. In doing so, the study contributes not only to simulation-based learning, but to a broader understanding of how judgement develops through structured experiential processes in higher education. The findings highlight that it is the visibility of consequences, the opportunity for repeated decision cycles, and the space for reflection that underpin meaningful learning.

Importantly, the development observed is better understood as the formation of judgement rather than the acquisition of decision-making skills alone. Learners demonstrated increasing capacity to interpret complex situations, evaluate trade-offs, and adapt their strategies in response to changing conditions. This suggests that simulation-based environments can support higher-order learning outcomes that are difficult to achieve through more traditional instructional approaches.

The implications of this study extend beyond business simulations. More broadly, it highlights the importance of designing learning environments that enable learners to experience the consequences of their actions, engage in iterative decision-making, and reflect on outcomes over time. By foregrounding these elements, educators can create conditions that support the development of capability rather than the reproduction of knowledge.

Future research should build on this work by examining how these processes evolve over longer timeframes and across different simulation designs. In particular, there is scope to explore how variations in feedback, structure, and facilitation influence the development of judgement in experiential learning contexts.

Ethics Declaration

This study involved human participants, and formal ethical approval was obtained from the university's ethics committee prior to data collection. All participants were informed of the purpose of the study and provided informed consent in accordance with institutional ethical guidelines. Participation was voluntary, and all responses were collected anonymously to ensure confidentiality.

AI Declaration

Artificial intelligence tools were used during the preparation of this manuscript to support proofreading, language refinement, and clarification of ideas. All intellectual contributions, critical analysis, and final decisions regarding the content were made by the authors.

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