



# The Impact of Learning Agility on Organizational Performance in Sport through Value Co-Creation and Adaptability

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## ABSTRACT

The aim of this study is to investigate the mediating role of value co-creation and employee adaptability in the relationship between learning agility and organizational performance in basketball clubs. The current research method is correlational carried out in the field. The research population was managers and employees of basketball clubs in Iraq. 427 subjects were studied using the stratified sampling method. The learning agility questionnaires of Gravett and Caldwell (2016), the value co-creation of Nysveen and Pedersen (2014), the adaptability of Van Dam and Meulders (2021), and the organizational performance of Delshab et al. (2022) were used. SPSS version 18 and PLS version 3 software were used for data analysis. The results showed that learning agility has a significant relationship with value co-creation and employee adaptability. Moreover, there is a significant relationship between value co-creation and employee adaptability with organizational performance. Finally, value co-creation and employee's adaptability have a mediating role in the relationship between learning agility and organizational performance. The current research showed that learning agility is a key concept for enhancing value co-creation and adaptability among employees, which leads to better organizational performance.

## Introduction

Learning agility is an important area of study in organizations because of the significant implications it has for individual adaptability and success in various contexts. Research has shown that learning agility is essential to agile workforces and businesses (Ghosh et al., 2021). It is considered a meta-competency for leadership success, especially in turbulent times (Harvey & Valerio, 2022). Learning agility is believed to be a key predictor of leadership performance and

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potential, making it an important element in leadership development (De Meuse, 2017). In addition, learning agility is essential for people to easily adapt to new changes (Handayani, 2021, December). Learning agility can play a vital role in fostering innovative behavior (Jo & Hong, 2022). It is believed to act as a personal representative resource to promote employee engagement (Jo & Hong, 2022). Learning agility in courses such as distance learning is critical to reducing burnout levels and achieving success (Novianti et al., 2023). High learning agility can predict people's ability to efficiently complete their tasks (Wijana, 2022). From a more holistic perspective, learning agility is beneficial not only at the individual level but also at the organizational level. It is known as a key element of learning facilitators (Hamad & Yozgat, 2017). Organizations that focus on agile learning strategies can better react to changes in their external environment and enable quick and effective responses to uncertainties (Armanious & Padgett, 2021).

Learning agility is an important aspect to study in the service field due to its significant impact on organizational performance and adaptability. Braunscheidel and Suresh's (2009) research emphasizes the importance of learning orientation as a cultural element in achieving agility in processes and highlights the need for organizations to be able to learn and adapt in dynamic markets. Likewise, Ahmed et al. (2019) found that learning orientation and flexibility in service companies are complementary to the goal of achieving agility in operations and emphasize the relevance of learning agility in increasing organizational capabilities. In the service industry, where rapid response to market changes and customer needs is essential, Humdan et al. (2023) emphasize that agility is a critical competency for acquiring market information and responding quickly to turbulence. This agility is closely related to learning agility, as organizations need to learn, learn and relearn to stay competitive and meet evolving customer expectations. Furthermore, Saputra et al. (2021) showed that learning agility directly affects work engagement and shows its role in employee motivation and performance. Additionally, De Meuse et al. (2010) and Wang and Beier (2012) highlight learning agility as a stable construct that enables individuals to quickly grasp situations and flexibly incorporate ideas to facilitate learning within and guide between experiences. In the service sector, where innovation and responsiveness are key drivers of success, the ability to learn quickly and adapt to changing conditions is critical. By studying learning agility in the service sector, organizations can increase their capacity to innovate, improve customer service, and ultimately drive organizational performance. Therefore, understanding and enhancing learning agility in service is essential for organizations aiming to thrive in dynamic and competitive environments.

Learning agility, which refers to an individual's ability to learn from experiences and apply that learning effectively in new or challenging situations (De Meuse et al., 2010), is an emerging area of research in the sport management literature. Learning agility in the workplace is a critical factor for organizational success in today's fast-paced and ever-changing business environment. Studies have highlighted various aspects of learning agility and its implications for organizations. De Meuse (2017) emphasizes the evolution of learning agility as a psychological construct and its empirical relationship to leader success and its growing popularity as a talent decision-making tool. In addition, Dries et al. (2012) emphasize the role of learning agility and career diversity in identifying and developing high-potential employees and recommend that organizations include learning agility criteria in their talent development processes. Noe et al. (2014) emphasizes the importance of learning in the contemporary work environment and state that human capital resources are essential for organizations to gain competitive advantage. In addition, Milani et al. (2021) provide a systematic review of learning agility and its applications in talent management, focusing on the definition, measurement, and operationalization of the construct. Organizational culture and practices also contribute significantly to fostering learning agility. Muduli (2016) highlights the impact of cultural aspects on organizational agility, especially in the context of digital innovation, and emphasizes the necessity for organizations to foster a culture that supports learning agility. Muduli (2016) examines the facilitators and mediators of workforce agility and shows that organizational practices such as learning and training, rewards, teamwork, and information systems enhance agility. As a result, the literature on learning agility in the workplace emphasizes the importance of fostering a continuous learning culture, integrating learning agility measures into talent development processes, and using human capital resources to increase organizational agility

and competitiveness. While research in the field of learning agility has been conducted in some fields, so far research has paid little attention to the predictors of learning agility and there is a scientific gap in this field. Therefore, the purpose of this research is to examine this gap.

According to the discussion, the aim of this research is to fill the scientific gap regarding predictors of learning agility. Therefore, the researchers in this study seek to investigate whether value co-creation and employee adaptability play a mediating role in the relationship between learning agility and organizational performance in basketball clubs. Basketball clubs in Iraq face numerous challenges, including limited resources, political instability, and a competitive sports environment. Despite these challenges, some clubs manage to excel, suggesting that certain organizational factors contribute to their success. One such factor is learning agility, which involves the ability to adapt quickly to changing circumstances. However, there is a lack of research on how learning agility influences organizational performance in sports, particularly in the context of value co-creation and adaptability. This study aims to explore the impact of learning agility on the performance of basketball clubs in Iraq, focusing on how value co-creation and adaptability mediate this relationship.

Basketball in Iraq is organized through the Iraqi Basketball Association, which is affiliated with FIBA and FIBA Asia. The association oversees various competitions, including the Iraqi Professional Basketball League, which is the highest professional league in the country. While basketball clubs in Iraq focus on physical agility to improve player performance, there is a broader need to study organizational agility and its impact on performance through value co-creation and adaptability. This research can help clubs innovate, engage fans more effectively, and maintain competitiveness in a dynamic sports environment. Iraq's basketball clubs operate in a unique environment characterized by political and economic challenges. Understanding how learning agility affects their performance can provide insights into strategies for success in similar contexts. This study contributes to the literature on organizational and learning agility in sports by examining the role of value co-creation and adaptability. It enhances our understanding of how these factors interact to influence organizational performance. The findings can inform strategies for improving organizational performance in sports clubs, particularly in challenging environments. By highlighting the importance of learning agility, value co-creation, and adaptability, the study can help clubs develop more effective management practices.

## **Hypotheses Development**

### **Learning Agility and Value Co-creation**

Value co-creation refers to a collaborative process in which actors (organization, employees, customers, etc.) jointly create value through interactions (Behnam et al., 2021). Shulga's et al. (2021) research emphasizes the mutual role of trust in customer value co-creation and highlights the importance of personal connection, behavioral and cognitive immersion, and emotional bonding in the co-creation process. This suggests that consumers with high learning agility may be more active in value co-creation processes and use their ability to learn quickly and adapt to meaningfully participate in value creation activities. Furthermore, Nadeem et al. (2021) discuss the role of ethical perceptions in consumer participation and value co-creation in sharing economy platforms. This research emphasizes that consumers' involvement predicts their intention to participate in value creation, especially when mediated by ethical perceptions. Consumers with high learning agility may demonstrate greater understanding of ethical considerations, leading to more active participation in value co-creation initiatives. Therefore, based on the theoretical foundations presented in the literature, it is acceptable to hypothesize that learning agility positively affects value co-creation and enables people to be actively involved in partnership and value creation with organizations.

**H1.** Learning agility is positively associated with value co-creation.

### **Learning Agility and Employee Adaptability**

Employee adaptability is defined as the tendency of people to be flexible, open-minded, and ready to actively change or adapt to new, variable, or ambiguous work environments (Van Dam & Meulders, 2020). Aslam et al. (2018) found that organizations that emphasize learning agility are better able to sense market changes and adjust their supply chain processes accordingly. Therefore,

a connection between learning agility and adaptability is established. In addition, DeRue et al. (2012) on how goal orientation affects learning and adaptation emphasize that individuals with strong goal orientation are more likely to seek feedback and effectively adapt their behaviors. This emphasizes the importance of individual characteristics, such as learning agility, in promoting adaptability in response to feedback and changing conditions. In addition, Park and Park (2021) explore concepts related to employees' ability to adapt, including adaptive performance, proactiveness, flexibility, and workforce agility. They identify learning agility as an important factor in employees' adaptive performance, showing that people with high learning agility are more likely to show adaptability in different situations. Combining these findings, we can theoretically justify that learning agility increases adaptability by enabling individuals and organizations to perceive changes, seek feedback, set goals, and effectively adapt their behaviors in response to evolving circumstances.

**H2.** Learning agility is positively associated with employee adaptability.

### **Employee Adaptability and Organizational Performance**

Griffin et al. (2007) identified adaptability as a sub-dimension of work role performance and emphasized its importance in uncertain and interdependent contexts. Denison and Mishra (1995) highlighted adaptability as a characteristic that predicts growth and complements quantitative and qualitative methods in the study of organizational cultures. Surace (2019) further strengthened the relationship between adaptability and organizational performance and showed that adaptability leads to improved performance. In addition, Franczak and Weinzimmer (2022) found a positive relationship between organizational adaptability and action, which subsequently affects organizational performance, especially in risk-oriented environments. Jundt et al. (2015) emphasized that adaptability does not only involve routine technical performance, but also the elimination of previous ways of doing things, which represents a deeper level of adaptability and behavior change. Studies by Tabiu et al. (2020) and Kim (2021) further support the importance of adaptability in organizational environments and highlight its critical role in enabling employees to effectively meet organizational demands. Organizations that foster adaptability among their employees and in their culture are more likely to achieve better performance outcomes, especially in dynamic and uncertain environments. Therefore, adaptability is a key factor affecting organizational performance.

**H3.** Employee adaptability is positively associated with organizational performance.

### **Value Co-creation and Organizational Performance**

Marcos-Cuevas et al. (2016) define value co-creation as an overarching construct that reflects the evolution of organizational entities toward deeper engagement with customers and emphasizes the importance of relational orientation. This interaction is further highlighted by Carvalho and Alves (2023), who emphasize the importance of the participation of tourists and guests in the co-creation of value in the hospitality and tourism industry. In addition, Shi et al. (2020) emphasize the importance of value co-creation in addressing challenges in processes and show its central role in problem solving. In this regard, Partouche-Sebban et al. (2022) examine the effects of value co-creation among professionals and in the business-to-business context and show its impact on individuals and organizations. Rösler et al. (2021) examine value co-creation between public service organizations and the private sector and highlight its importance from the perspective of organizational capabilities. Therefore, organizations that actively engage in value co-creation practices with stakeholders, customers, and employees are likely to experience better performance outcomes, improved relationships, and increased competitiveness in their respective industries. Hence, value co-creation can be a key factor for organizational performance.

**H4.** Value co-creation is positively associated with organizational performance.

## **Methodology**

The current research method is correlation, which was carried out in the field. The research population was made up of managers and employees of basketball clubs in Iraq (10 cities). Based on Morgan's table, at least 384 people were selected as a sample using the stratified sampling method. For this purpose, each city was divided into five regions (North, South, East, West and Center). From each city, clubs were randomly selected (5 clubs from each city and 50 clubs in

total). The response time was approximately 20 minutes. To account for potential non-response and incomplete questionnaires, as suggested by previous literature, researchers distributed 435 questionnaires, anticipating a drop rate of 10-15%. Ultimately, 427 complete and accurate questionnaires were collected through convenience sampling and eight questionnaires were deleted because of incomplete responses to several items. The data was collected face-to-face in January 2024.

First, the library method was used to review the literature. The following standard questionnaires were used to collect data. For value co-creation, the five-question questionnaire of Nysveen and Pedersen (2014) was used. For learning agility, Gravett and Caldwell's (2016) twenty-five question questionnaire was used, which has four sub-components of mental agility with six items, change with six items, results with seven items, and people with six items. For employees adaptability, the 10-question questionnaire of Van Dam and Meulders (2020) was used, which has three sub-components of cognitive adaptability of three items, emotional adaptability of four items and behavioral adaptability of three items. For organizational performance, the 26-question questionnaire of Delshab et al. (2022) was used, which has six sub-components: sports (seven items), members (four items), finance (four items), strategy (four items), internal business process (three items), and learning and growth (four items). In the results section, the reliability of the questionnaires is reported. To measure content validity, questionnaires were reviewed by 8 sports management professors.

Descriptive statistical methods were used to analyze the data in the descriptive section. Partial Least Squares (PLS) was employed for the data analysis. Note that PLS makes less demand compared to covariance-based approaches such as distributions, sample sizes, and measurement scales (Chin, 1998). All the measurements in this study were reflective, and the internal consistency, indicator reliability, and convergent validity were assessed (Chin, 1998; Hair et al., 2016). Internal consistency reliability was tested by calculating composite reliability (CR) (Chin, 1998; Fornell & Larcker, 1981), while indicator reliability was tested using outer indicator loadings. Both values should exceed the threshold of .70 (Hair et al., 2016). Convergent validity was inspected using the average variance extracted (AVE) (Chin, 1998), which should exceed the threshold of .50 (Fornell & Larcker, 1981). Therefore, SPSS version 18 and PLS version 3 software were used.

## Results

The results of the descriptive statistics section showed a total of 427 participants, 69.5% of whom are men (297 people) and 30.5% women (130 people). In terms of education, the highest frequency with 43.5% (186 people) is bachelor's degree and the lowest frequency with 2.5% (11 people) is related to doctorate. Regarding the age distribution of the samples, the highest frequency with 37.2% (159 people) is 31 to 40 years old and the lowest frequency with 12.9% (55 people) is related to 60 years and above.

In order to fit the measurement model, confirmatory factor analysis was performed. To test the reliability of the external model, Cronbach's alpha and composite reliability were used, the results of which are given in Table 1. As can be seen in the table, Cronbach's alpha values and composite reliability are more than 0.7 for all constructs, and this is a sign of the suitability of the internal stability of the measurement model. According to Table 1, the composite reliability is greater than the mean of the extracted variance, which indicates the appropriateness of the reliability of the measurement model. Also, the factor loadings of the items were between 0.55 and 0.93, which is one of the signs of the appropriate fit of the measurement model.

**Table 1.** Cronbach's alpha coefficients and composite reliability

Variable	Cronbach's alpha	Composite reliability
Value co-creation	<b>0.81</b>	<b>0.83</b>
Learning agility	<b>0.79</b>	<b>0.82</b>
Employees adaptability	<b>0.84</b>	<b>0.86</b>

<b>Organizational performance</b>	<b>0.76</b>	<b>0.79</b>
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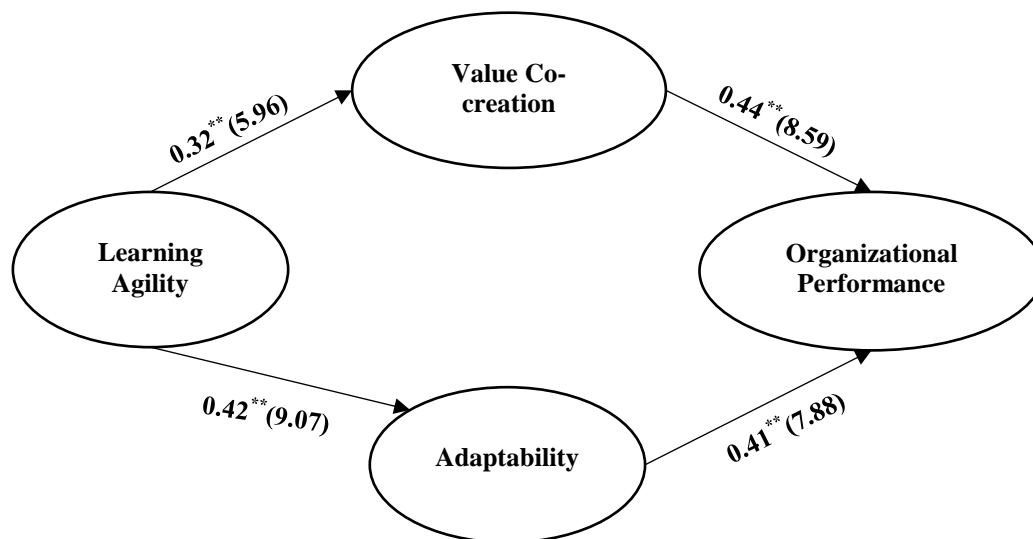
For the validity of the constructs (discriminative validity), Fornell and Larcker (1981) suggest that the root mean of the extracted variance of each variable should be greater than the correlation of that variable with other variables. This means that the correlation of each hidden variable and its indicators (manifest variables) must be higher than the correlation of that variable with other variables. The root mean variance extracted is given at the end of each row in Table 2. The values of each variable are higher than the correlation of each variable with other variables, and this indicates the acceptable validity of the measurement tools.

**Table 2.** Correlation matrix of research variables and square root of AVE

<b>Variable</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Value co-creation</b>	<b>0.75</b>			
<b>Learning agility</b>	0.37	<b>0.78</b>		
<b>Employees adaptability</b>	0.26	0.47	<b>0.73</b>	
<b>Organizational performance</b>	0.49	0.31	0.45	<b>0.80</b>

To determine the appropriate fit of the research model in PLS software, we used Q2 and R2 coefficients. Q2 coefficient or predictive power for value co-creation is 0.23, employee's adaptability is 0.36 and for organizational performance is 0.41, which is higher than 0.15 and 0.35. These coefficients indicate the good fit of the structural model. Also, R2 coefficient or determination coefficient of 0.71 was obtained, which is higher than 0.67. This coefficient also indicates the appropriate fit of the structural model. Based on the data analysis algorithm in the PLS method, after checking the fit of the measurement, structural and general models, the research hypotheses are tested by checking the significant coefficients of each of the paths as well as the standardized coefficients of the factor load related to the paths. If the t value of each path is more than 1.96, the corresponding path is confirmed at the 95% confidence level and the related hypothesis is confirmed. Based on the conceptual model tested in Figure (1), the output shows the t coefficients. Therefore, at the 95% confidence level, the predicted paths of learning agility - value co-creation, learning agility - employees' adaptability, value co-creation - organizational performance, and employee's adaptability - organizational performance are significant.

After the standard estimation was done, the cause-and-effect relationship between the research constructs was examined. As can be seen in figure number (1), the relationship between research variables is confirmed because their significant numbers are not between 1.96 and -1.96. In other words, learning agility has a direct, positive, and significant relationship with value co-creation (t=5.96;  $\beta$ =0.32) and employees' adaptability (t=9.07;  $\beta$ =0.42). Value co-creation and employee's adaptability have a direct, positive, and significant relationship with organizational performance (t=8.59,  $\beta$ =0.44; t=7.88,  $\beta$ =0.41, respectively). Value co-creation and employee's adaptability have a mediating role on the relationship between learning agility and organizational performance (t=8.59,  $\beta$ =0.14; t=4.91,  $\beta$ =0.17, respectively).



**Figure 1.** Structural model with path coefficients and T values. (\*\*  $p < .001$ )

## Discussion and Conclusion

Consistent with hypothesis 1, results demonstrated that learning agility affects value co-creation in basketball clubs. From a service-dominant logic perspective Grönroos (2011), value co-creation involves dialogical processes where both parties are active, learn together, and directly influence each other. This highlights the importance of continuous learning and adaptation in the co-creation process. Additionally, the study by Behnam et al. (2023) emphasizes the moderating effect of fan engagement on the relationship between fan knowledge and co-creation, indicating that active engagement and learning among fans can enhance the co-creation process.

Hypothesis 2 was supported, as learning agility affects the adaptability of employees in basketball clubs. Learning agility is considered a fundamental aspect of workforce agility, which is essential for individuals to quickly adapt to changes and challenges (Park & Park, 2021). The concept of learning agility is closely linked to adaptability, as individuals who possess high learning agility are more likely to be flexible, open to change, and able to thrive in dynamic environments (Jo & Hong, 2022).

Our research highlighted that value co-creation has an effect on organizational performance in basketball clubs, supported H3. The concept of value co-creation emphasizes the importance of engaging stakeholders in the creation of value, leading to enhanced innovation, market growth, and improved consumer satisfaction, all of which contribute to organizational performance (Brand Ortiz et al., 2022). This collaborative approach is essential for sports clubs to adapt to the dynamic and competitive sports industry landscape. Studies have shown that value co-creation capabilities are crucial for enhancing organizational performance by fostering innovation and improving consumer satisfaction (Brand Ortiz et al., 2022).

Our results revealed that adaptability of employees has an effect on organizational performance in basketball clubs. The theoretical framework of organizational institutionalism emphasizes the production of homogeneity among actors in an organizational setting through isomorphic processes (Stenling & Fahlén, 2016). In the context of sports clubs, this could imply that promoting adaptability among employees can contribute to aligning organizational goals and behaviors, ultimately enhancing organizational performance. Employees who are adaptable are more likely to share and apply knowledge effectively, leading to improved organizational performance (Delshab et al., 2021; Delshab et al., 2019). Additionally, the ability of employees to adapt to changing organizational demands and opportunities is essential for operational effectiveness, highlighting the importance of adaptability as a crucial component of performance (Tabiu et al., 2020).

Finally, we showed that value co-creation and employee adaptability have a mediating role in the relationship between learning agility and organizational performance. Value co-creation, which involves the collaborative creation of value between service providers and customers, has been

found to play a mediating role in various contexts (Mubushar et al., 2021; Waseem et al., 2021; Watanabe, 2014). For instance, Watanabe (2014) confirmed the mediating role of co-creation of value in a BtoB context, while Waseem et al. (2021) highlighted the drivers of employee motivation to facilitate value co-creation. These findings support the notion that value co-creation is a significant factor in organizational processes. Employee adaptability, often referred to as learning agility, has also been recognized as a crucial element in organizational performance (Lee & Song, 2022; Ludviga & Kalvina, 2023). Lee and Song (2022) discussed adaptability in terms of the ability to generalize knowledge and skills acquired to create performance in a changing environment, emphasizing its importance. Additionally, Ludviga and Kalvina (2023) examined the mediating role of perceived strategic agility in relation to employee outcomes during crises, further highlighting the significance of adaptability in organizational contexts.

Our study generates several important managerial implications. First, Leveraging learning agility can facilitate improved stakeholder engagement within sports clubs. By promoting a learning environment that values diverse perspectives and knowledge sharing, clubs can enhance collaboration and co-creation efforts with stakeholders, ultimately leading to the creation of more valuable experiences (Kolyperas et al., 2019). Also, Designing practices related to organizational learning and training can significantly contribute to enhancing workforce agility. By investing in continuous learning initiatives, sports clubs can foster a culture of adaptability and innovation among employees, enabling them to respond proactively to challenges and opportunities (Muduli, 2016).

Second, by engaging in value co-creation activities, sports clubs can leverage the diverse expertise and perspectives of stakeholders to drive performance improvements and gain a competitive edge in the market (Nelly Sari et al., 2022). Additionally, the ability to co-create value has been linked to increased trust, commitment, and well-being among stakeholders, further enhancing organizational performance (Janjua et al., 2021). Sports clubs should focus on actively involving stakeholders, such as fans, sponsors, and community members, in value co-creation processes. By understanding and leveraging the unique contributions of each stakeholder group, clubs can enhance the value they deliver and improve organizational performance (Brand Ortiz et al., 2022).

Third, in the sports club context, the ability of clubs to adapt to variable economic, political, social, and cultural environments is crucial for achieving their sporting objectives and organizational development (Escamilla-Fajardo et al., 2019). Sports clubs should navigate these external conditions to effectively offer their services and meet their objectives. Developing training programs that focus on enhancing employee adaptability can be beneficial for sports clubs. Training initiatives can help employees acquire the necessary skills to navigate uncertain and interdependent contexts effectively (Tabiu et al., 2020).

Forth, The findings suggest that organizations should focus on facilitating employee involvement in value co-creation (Marcos-Cuevas et al., 2016; Oertzen et al., 2018; Xu et al., 2023). This involves directing organizational resources towards areas that enhance employee participation in creating value for customers. Service managers can utilize these implications to develop co-creation capabilities and practices within their organizations, thereby fostering a culture of value co-creation. Moreover, the results emphasize the importance of workforce agility, organizational learning, and human resource development (Muduli, 2016; Otoo et al., 2019). Organizations are encouraged to design and implement practices related to organizational learning, training, compensation, and involvement to enable agility within the workforce.

There are limitations in the current study. First, this research is based on a single context, which limits the generalizability of the current research model. In order to generalize the results, it is recommended that future studies be performed in other sports contexts or industries. Second, the cross-sectional data do not consider the impact of the past causal association of employee adaptability, value co-creation, and learning agility. A longitudinal study would further strengthen the results and overcome this limitation. We considered employee adaptability and value co-creation as a mediating variable that would influence the relationship between learning agility and

organizational performance. Several other factors may be related to performance. Future studies could consider additional factors such as employee engagement as moderating variables.

## Ethical Considerations

**Compliance with ethical guidelines:** Ethical points have been observed.

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**Conflict of interest:** there is no conflict of interest.

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