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The role of Entrepreneurial Resilience in enhancing Organizational Agility
An Analytical Study of the Perspectives of Managers and Employees in Some Construction Firms in the Kurdistan Region of Iraq (KRI)*

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Abstract:
The main objective of this study is to examine the role of entrepreneurial resilience in enhancing organizational agility in construction firms in the Kurdistan Region of Iraq (KRI). To achieve this objective, a quantitative approach based on a stratified random sampling technique was conducted. A total of 387 forms were accurately returned by employees and managers from the four governorates of Duhok, Sulaymaniyah, Halabja, and Erbil in the KRI. SPSS 26 was utilized for initial data analysis and descriptive statistics, whereas AMOS 26 was used for hypothesis testing utilizing SEM and CFA to validate the measurement model. The main results revealed that there is a statistically significant relationship between entrepreneurial resilience and organizational agility. Entrepreneurial resilience has statistically significant impact on organizational agility. All dimensions of entrepreneurial resilience, except risk tolerance, had a significant influence on organizational agility. Competence was the highest-rated agility dimension, while responsiveness was the lowest. It is suggested that organizations take managed risks and increase responsiveness by enhancing communication, making faster decisions, and actively involving stakeholders.

*The research is extracted from a master's thesis of the first researcher.

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دور المرونة الريادية في تعزيز المرونة التنظيمية
دراسة تحليلية لآراء المديرين والموظفين في بعض شركات البناء في إقليم كردستان العراق*

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المستخلص

إن الغرض الرئيس من هذه الدراسة هو التحقق من دور المرونة الريادية في تعزيز المرونة التنظيمية في شركات البناء في إقليم كردستان العراق. ومن أجل تحقيق هذا الهدف تم اعتماد منهج كمي قائم على أسلوب العينة العشوائية الطبقية. ومن أجل جمع البيانات تم استلام ما مجموعه 387 استمارة استبيان من الموظفين والمدراء في محافظات دهوك، السليمانية، حلبجة، وأربيل في الإقليم. تم استخدام برنامج SPSS 26 لتحليل البيانات الأولي والإحصاءات الوصفية، بينما تم استخدام برنامج AMOS 26 لاختبار الفرضيات باستخدام نمذجة المعادلات الهيكلية (SEM) وتحليل العامل التأكيدي (CFA) للتحقق من صحة نموذج القياس، أظهرت النتائج الرئيسة وجود علاقة ارتباط ذات دلالة إحصائية بين المرونة الريادية والمرونة التنظيمية، فضلا عن أن للمرونة الريادية تأثيرًا ذا دلالة إحصائية على المرونة التنظيمية. وقد تبين أن جميع أبعاد المرونة الريادية، باستثناء تحمل المخاطر، كان لها تأثير كبير على المرونة التنظيمية. وكان بُعد الكفاءة هو الأعلى تقييمًا بين أبعاد المرونة التنظيمية، في حين كان بُعد الاستجابة هو الأدنى. وتوصي الدراسة بأن تتبنى المنظمات مخاطر مدروسة وتعمل على زيادة مستوى الاستجابة من خلال تحسين التواصل، واتخاذ قرارات أسرع، والمشاركة الفاعلة لأصحاب المصلحة.

الكلمات المفتاحية: المرونة الريادية، المرونة التنظيمية، شركات البناء، إقليم كردستان العراق.

1. Introduction

1.1 Background of the Study

In today's fast-changing business world, businesses have to constantly reinvent themselves. The capacity of business owners and entrepreneurs to resist setbacks and bounce back from setbacks is otherwise known as entrepreneurial resilience and has increasingly become important in maintaining and enhancing organizational agility.

Whereas, entrepreneurial resilience is a fundamental building block that considers entrepreneurial behavior, which not only facilitates entrepreneurs to overcome unseen adversity and adapt to uncertainty, but can also facilitate entrepreneurs to recover and thrive in failure (Hao *et al.*, 2020). Entrepreneurial resilience refers to the capability of entrepreneurs to withstand adversity, rebound from disruptions, and preserve business continuity in hostile environments (Ayala & Manzano, 2014). It is composed of a mix of psychological, behavioral, and strategic dimensions such as resourcefulness, optimism, hardiness, proactiveness, risk tolerance, and flexibility (Korber & McNaughton, 2018).

* البحث مستل من رسالة ماجستير للباحث الأول.

On the other hand, organizational agility remains one of the most critical characteristics of modern management that enables organizations to effectively weather changing market conditions and unforeseen adversity (Kocot *et al.,* 2024). Organizational agility is a critical variable in a company's successful operation, influencing a vast majority of key areas in its performance. Organizational agility is today also generally regarded as a key competence for businesses seeking to survive and thrive in today's fast moving and very volatile digital environment. This concept encompasses not only the speed of response but also the flexibility and resiliency that enable an organization to change course when faced with new challenges or opportunities (Ononiwu *et al.,* 2024). Hence, the purpose of this research is to discover the role of entrepreneurial resilience in enhancing organisational agility, especially in the construction sector in the Kurdistan Region of Iraq (KRI).

1.2. The Research Problem and Research Questions of the Study

The research issue focuses on the dependent variable, which is organizational agility. The study seeks to determine how organizational agility can be enhanced in the construction industry, particularly in consideration of the KRI. The issue is explored from two complementary points of view: theory and practice.

At a theoretical level, the gap in literature is evident. While organizational agility has been researched in depth across various industries including general business (Cegarra-Navarro & Martelo-Landroguez, 2020); higher education (Menon & Suresh, 2021); crisis contexts such as the COVID-19 pandemic (El Idrissi *et al.,* 2023), telecommunication industry (Nafei, 2016); transport industry (Nouri & Mousavi, 2020); banking industry (Al, 2022); IT industry (Yi & Kim, 2025); healthcare industry (Kamel *et al.,* 2025); and hospitality industry (Touni *et al.,* 2025), limited researches specifically outline how this can be transferred to construction firms, especially those that are operating in politically and economically unstable regions like the KRI. Moreover, although entrepreneurial resilience has been attributed to other sectors' agility, very little is known concerning its influence on agility in the construction sector.

In practice, this study investigates organizational agility through its four key dimensions: responsiveness, speed, flexibility, and competence. These are of utmost importance to construction companies that grapple with complex issues such as low productivity, defects, project delay, and cost overruns (Çardak, 2019). The construction industry in the KRI is therefore facing serious challenges like low productivity, low quality, delays, and cost overruns. In addition, its dynamic nature makes it difficult to be flexible. While organizational agility is being offered as a solution, how it is applied in the KRI construction sector has not been comprehensively researched yet. This research aims to explore how entrepreneurial resilience can be utilized to enhance organizational agility and deal with these pressing issues.

This study tries to response the following questions

1. what are the level of the variables study in the researched field?
2. is there a statistically significant correlation between entrepreneurial resilience and organizational agility?

3. Does entrepreneurial resilience have a statistically significant influence on organizational agility?

1.3. Aims and Objectives of the Study

The aims of the current research include the following:

1. To identify the level of the variables study in the researched field
2.To examine the statistically significant correlationtional relationship between entrepreneurial resilience and organizational agility.
3. To assess the statistically significant impact of entrepreneurial resilience on organizational agility.

1.4. Significance of the Study

The significance of the study lies in being a comprehensive source of information and knowledge about entrepreneurial resilience, entrepreneurial resilience in the constructions sector specifically in KRI, where there has been scant research. In addition, by identifying gaps in knowledge and areas where further research is necessary, this study will guide future researchers in coming up with new hypotheses and research questions. It will also identify what entrepreneurial resilience dimensions, such as hardiness, resourcefulness, optimism, and pro-activeness have not been adequately explored in the construction industry, to enable future researchers to build on this groundwork. Lastly, this study will act as a baseline resource for researchers seeking knowledge on organizational agility, both synthesizing a body of evidence and mapping where knowledge must progress in this critical field. Thus, it enables organizations to adapt to dynamic changing circumstances and achieve competitive success.

1.5. Proposed Model of the Study

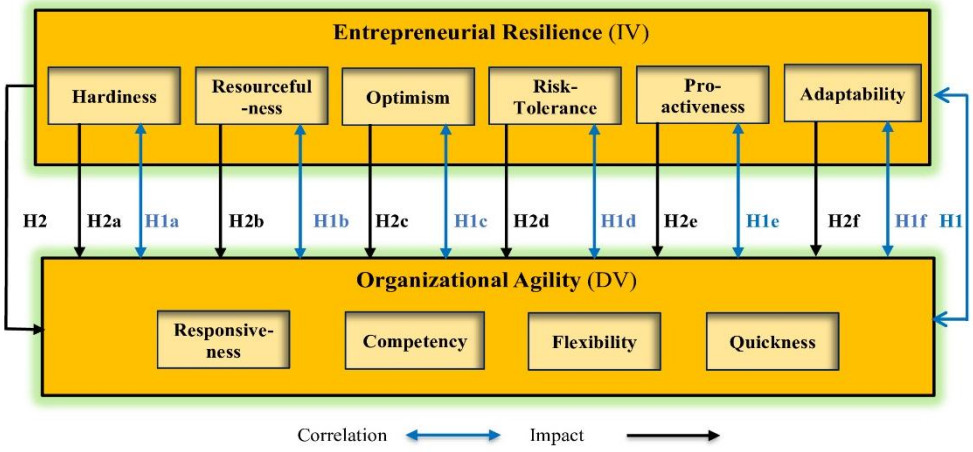

Figure 1: Proposed Model of the Study (*Source: Based on Primary Data*)

1.6. Hypotheses of the Study

H1: the ordinal importance of variables study and its dimensions differs according to the nature of reliance on it by the construction firms in KRI.

H2: There is a statistically significant correlation between entrepreneurial resilience and organizational agility at a significance level of ($\alpha \leq 0.05$).

H2a: There is a statistically significant correlation between hardiness and organizational agility at a significance level of (α≤ 0.05).
H2b: There is a statistically significant correlation between resourcefulness and organizational agility at a significance level of (α≤ 0.05).
H2c: There is a statistically significant correlation between optimism and organizational agility at a significance level of (α≤ 0.05).
H2d: There is a statistically significant correlation between risk- tolerance and organizational agility at a significance level of (α≤ 0.05).
H2e: There is a statistically significant correlation between pro-activeness and organizational agility at a significance level of (α≤ 0.05).
H2f: There is a statistically significant correlation between adaptability and organizational agility (α≤ 0.05).
H3: Entrepreneurial resilience has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05).
H3a: Hardiness has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05).
H3b: Resourcefulness has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05).
H3c: Optimism has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05).
H3d: Risk- Tolerance has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05).
H3e: Pro-activeness has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05).
H3f: Adaptability has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05).

2.Theoretical Background of Entrepreneurial Resilience

2.1. Concept and Definition of Resilience

The term resilience is derived from the Latin verb "resilire", which means "to leap back" or "bounce back" (Hosseini *et al.,* 2021). The concept was initially developed in mechanics and material science to define the capacity of materials to absorb stress and recover their original form (Salvato *et al.,* 2020). Over time, the idea developed into other areas such as ecology (Holling, 1973), psychology (Fletcher & Sarkar, 2013), and social sciences (Masten, 2009). In psychology, resilience is typically described as one's ability to cope effectively with stress, trauma, or adversity and recover from problems in a healthy constructive manner (Hallak *et al.,* 2018).

2.2. Concept and Definition of Entrepreneurial Resilience

Entrepreneurial resilience is an accurate description of the general principle of resilience when applied to entrepreneurship. Entrepreneurial resilience is the capacity of the entrepreneur to bounce back, adjust, and evolve when faced with perpetual adversity, uncertainty, and market turbulence (Amadi & Nwokah, 2024). Entrepreneurial resilience differs from general resilience, which may be individual-cantered and directed towards individuals' well-being, but entrepreneurial resilience is more strategy-oriented, flexible, and future-oriented

when used in entrepreneurial settings (Fatoki, 2018). Castro & Zermeno (2021) define it as the ongoing ability of entrepreneurs to adapt to change, seize opportunity, and change direction when needed.

2.3. Dimensions of Entrepreneurial Resilience

Several experts believe that hardiness, resourcefulness, and optimism are important determinants of entrepreneurial resilience (Singh Yu, 2010; Adeniran et al., 2012; Wu et al., 2019; Omar et al., 2024). Others, however, have stressed factors like as risk tolerance, adaptability, and proactiveness (Lee et al., 2015; Mansi, 2021; Shan & Tian, 2022; Aidoo et al., 2023; Amadi & Nwokah, 2024). The dimensions were selected due to their frequent utilization in previous research and their compatibility with the research's goals and context. The primary dimensions of entrepreneurial resilience are as follows:

2.3.1. Hardiness

Hardiness is a personality trait that allows one to exercise resilience by coping effectively with stress and turning adversity into opportunities for growth (Bartone *et al.,* 2008). It was initially introduced by Kobasa (1979) to explain how some individuals perform well under stress and others do not. Hardiness was subsequently defined by Maddi and Khoshaba (1994) as a way of redefining stressful situations as debilitating to developmental experiences.

2.3.2. Resourcefulness

Resourcefulness is a key aspect of entrepreneurial resilience, and it describes the capacity to act resourcefully and well in the face of limits or adversity. It can be broadly defined as making more out of less through the use of ingenuity and adaptability to work around constraints (Powell, 2011). According to Powell & Baker (2011), resourcefulness is just having things under command, while Michaelis *et al.* (2020) describe it as the capacity to accomplish more with fewer through selecting creative and intelligent ways of sourcing, structuring, and deploying them.

2.3.3. Optimism

Optimism is one of the psychological traits that plays a very significant role in entrepreneurial resilience. It refers to the entrepreneur's capacity to remain positive in spite of adversity and ambiguity (Ayala & Manzano, 2014). Optimists believe that failure and mistakes are learning and growth lessons, so they can weather adversity with hope and enthusiasm. In entrepreneurship, optimism figures prominently in fostering resilience, motivation, and adaptability. Positive entrepreneurs correctly assess their business world, stay concentrated, correct performance when necessary, and learn from the past constructively (Nguyen *et al.,* 2016).

2.3.4. Risk tolerance

Risk tolerance indicates risk tolerance that the person will embrace and undertake (Legault, 2019). It considers risk tolerance in terms of a risk-taking attitude and separates this pure attitude variable from psychological variables that measure risk and return in their own terms, as well as from the expected value and variance of the distribution of potential outcomes (Weber & Milliman, 1997). Risk

tolerance is described as the inclination to engage in a behaviour that has a risky nature in which possible outcomes are unfavourable (Grable, 2017).

2.3.5. Adaptability

Adaptability entails continuous learning and change, whereby entrepreneurs learn new capacities, knowledge, and perceptions so that they can effectively cope with uncertain and complicated environments (Corner *et al.,* 2017). It is the entrepreneurial capacity to innovate and solve problems creatively under pressure, thereby ensuring business continuity and growth despite external interruptions (Williams *et al.,* 2017). Besides, adaptability is a central element of resilience, showing the entrepreneur's capacity to recover from setbacks, bounce back, and thrive under adversity (Linnenluecke, 2017).

2.3.6. Pro-activeness

Pro-activeness refers to intentions of preparing ahead and taking action to anticipating problems or forecasts rather than waiting until the problem or forecasts arises before correcting it. Pro-activeness has to do with how an enterprise enters market opportunities in new entry dynamics, so it is to create trends and even create demand. Pro-activeness is the firm's willingness and ability to look ahead to new development. Intuitiveness is the ability of the entrepreneur to initiate encouraging the firm employees to do something useful that benefits himself, society and the organization (Al-Damen, 2015).

2.3. Theoretical Background of Organizational Agility

2.3.1. The Concept and definition of Agility

The word 'agility' was first used in studies on various topics such as change, production, environmental uncertainty, leadership, information technology, and later it was determined that many new words such as agile organization, agile business processes, and agile system emerged from this term (Biçer, 2021). Background of agility is related to America recession phase and reduction of competitiveness in America's industry during the 1980s (Ramzanian *et al.,* 2013). The concept of agility, which was described as the ability of rapid thinking and effortless action, was first presented at the start of the 1990s and was considered as a factor for the company to survive under changing environmental conditions (Nafei, 2016). In the 2000s, the concept of agility was developed in order to foresee and deal with intricate and quick-evolving developments (Biçer, 2021).

2.3.2. The Concept and Definition of Organizational Agility

The organizational agility principle is based on two previous related principles: organizational adaptability (reactive by nature) and organizational flexibility (proactive by nature) (Sherehiy *et al.,* 2007). Following the same vein, Organisational agility can be seen as the ability of a company to sense environmental change and to react fast to it by re-framing its resources, processes, and strategies (Overby *et al.,* 2006). Organizational agility is the perception of the enterprise's ability to sense in advance and answer to external opportunities and threats effectively, rapidly, and with agility. Indicators used: competency, quickness, responsiveness, and flexibility (Ismail & Supanto, 2024).

2.3.3. Dimensions of Organisational Agility

Sharifi and Zhang (1999) identified four important dimensions, such as responsiveness, competency, flexibility, and speed, which have been connected to organisational agility. While there are a number of diverse opinions expressed by various researchers in the literature, several studies (such those by Sharifi & Zhang, 1999; Zhang and Sharifi, 2000; Crocitto & Youssef (2003); Nejatian & Zarei (2013); Bahrami *et al.*, 2016; Esmaeil and Mohammadhossei, 2018; Felix and Hamilton, 2019; Tjhin et al., 2023) emphasized that organisational agility is identified by four basic dimensions. The dimensions of organizational agility were chosen because they have been utilized in a number of prior research and because they are suitable for accurately measuring agility in organizational contexts.

2.3.3.1. Responsiveness

The first organizational agility capability is responsiveness (Sharifi, 1999). The requirements and wishes of consumers may shift by time, as a result of shifts in technology and environment. Organisations must reply at the right place and time to such shifts. This is a reflection that the company is organisationally flexible and utilizes its reaction capability. Enterprises that address difficulties through an extensive product/market scope and by spearheading industry transformation can effectively respond to difficulties by monitoring marketing trends (Nwanzu & Babalola, 2019).

2.3.3.2. Competence

Agile organizations are greatly dependent on the strengths and capabilities of its individuals, such as employees and managers, to absorb learning and proceed with change. Thus, looking at human resources as the most important assets in an organization's asset pool, we need to look at the capability of reconfiguring and reforming the individuals into business needs with the result of creating organizational agility (Felix & Hamilton, 2019). Competence, thus, deals with how an organization can effectively utilize its resources in the direction of goal maximization. Obiekwe (2018) explained that organizational competencies can be obtained effectively with the utilization of effective human capital development.

2.3.3.3. Flexibility

Flexibility refers to the capacity to generate and provide various products while attaining diverse aims utilizing the same resources and equipment. Ability to adjust and change as quickly as possible in today's ever-evolving business environment has turned into a concern to most organizations (Felix & Hamilton, 2019). For construction organizations, flexibility could mean adapting project plans to fit changes in design or availability of resources. Organizational flexibility was found by a study conducted by Desalegn *et al.,* (2024) to be a key determinant of agility, as it allows companies to reconfigure resources and processes effectively in response to changing project requirements.

2.3.3.4. Speed (Quick)

Speed is a specific interval of time an organization took to react to occurrences in its environments. This is the capacity to perform activities so easily (Christopher, 2000) or respond easily to change in business environment (Hoyt et al., 2007). Speed is decision-making process. It is vital for a business to grow new knowledge in face of field changes in the domain of innovation capacities. In

business, speed implies ability to shorten, reduce, and compress the time involved in producing, testing, and launching new services or products (Rigby *et al.,* 2020).

3. Research Methodology

3.1. Research Design and Strategy

This study adopts a quantitative technique for data gathering and analysis. A descriptive research design was used to systematically investigate the relationship between entrepreneurial resilience and organization agility. The study utilized a questionnaire approach, which is appropriate for collecting standardized data from a broad population efficiently (Blumberg *et al.,* 2014).

3.2. Population, Sampling, and Sample Size

The target population of the study was a specific group of administrative staff and employees of several construction firms that were selected from 74 construction firms spread over four governorates: Erbil (205), Duhok (84), Sulaimani (45), and Halabja (22). A stratified random sampling technique was conducted for this study. For the aim of this study, the sample size is finite, and a total of 387 participants were chosen.

3.3. Data Collection and Instrument

Primary data were collected using a structured questionnaire divided into four sections: demographic information, Entrepreneurial resilience, and organizational agility. A five-point Likert scale was used to record responses from 1 (strongly disagree) to 5 (strongly agree). Entrepreneurial resilience dimensions (hardiness, resourcefulness, optimism, risk tolerance, pro-activeness and adaptability) were selected in this study. To examine those dimensions, 30 statements were framed based on the finfings of previous study, like (Lee et *al.,* 2015; Mansi, 2021; Shan & Tian, 2022; Aidoo *et al.,* 2023; Amadi & Nwokah, 2024; Omar *et al.,* 2024).

The key dimensions of organizational agility are selected as (responsiveness, competency, flexibility, and quickness). In order to assess organizational agility, 20 statements from the earlier studies were selected, e.g., (Sharifi & Zhang 1999; Zhang & Sharifi, 2000; Lee *et al.,* 2015; Oktay, 2020; Akkaya & Tabak, 2018; Koçyiğit & Akkaya, 2020; ElBadaway et al., 2024). The questionnaire was subsequently translated into Arabic and Kurdish and examined by experts to ensure that it was clear and accurate. The final instrument comprised 58 items.

3.4. Data Analysis Tools

In this study, various facilities in the Statistical Package for the Social Sciences (SPSS) version 26 were utilized in initial data analysis and descriptive statistics. The Analysis of Moment Structures (AMOS) version 26 was also applied in hypothesis testing through Structural Equation Modelling (SEM), comprising Confirmatory Factor Analysis (CFA) for measurement model validation.

4. Results and Discussions

The section also describes the study sample and analyzes responses through descriptive statistics, including frequencies, means, and standard deviations. Finally, it tests the main and sub-hypotheses to validate the study's proposed model in the context of construction firms in the KRI.

4.1. Demographic background of the respondents

Table (1): Demographic background of the respondents

Demographic Characteristic		Freq.	%	Demographic Characteristic		Freq.	%
Gender	Male	275	71.1	**Current Job Position**	Project Manager	41	10.6
	Female	112	28.9		Unit Manager	71	18.3
Age	Under 25	32	8.3		Employee	275	71.1
	25-30	164	42.4	**Work Experience**	1 to 4 years	162	41.9
	31-40	127	32.8		5 to 10 years	47	12.1
	41-50	54	14.0		11 to 15 years	62	16.0
	50 and more	10	2.6		16 to 20 years	32	8.3
					21 years and more	84	21.7
Educational Level	Primary School	8	2.1	**Location**	Erbil	205	53.0
	Secondary School	9	2.3		Duhok	84	21.7
	High School	23	5.9		Sulaymaniyah	45	11.6
	Diploma	55	14.2		Halabja	22	5.7
	Bachelor	258	66.7		Soran In.Admin.	31	8.0
	Master	29	7.5				
	PhD	5	1.3				

Source: Primary data based on (SPSS-26) program.

The outcomes mentioned in the Table (1) demonstrate a description of the personal characteristics of the study sample in the in some construction firms in KRI, which can be reviewed according to the following sections:

1. Gender: Table (1) display that the percentage of respondents from males is (71.1%), while females recorded (28.9%). This indicates that the majority of participants are males, and reason behind may be related to the nature of the job which is construction as well as the endure of males would be greater for working long hours and night shifts.

2. Age: it can be realized from the data in Table (1), that the highest percentage of the study sample according to age is in the age group (25-30 year) with a rate of (42.4%). Nevertheless, the lowest percentage is located in the age group (50 years and more) with a rate of (2.6%). This shows that the majority of respondents in the firms surveyed are from the age group that possesses the mental and physical abilities and capabilities that qualify them to work and with high levels of activity.

3. Education Level: base on the information contained in Table (1), it is clear that the majority of respondents hold Bachelor degree with a rate of (66.7%), followed by those with Diploma (14.2%), and those who holding Master degree with the rate of (7.5%). The table also shows that the percentage of PhD degree holders among

the research sample is (1.3%). This indicates that the sample members hold certificates that qualify them to answer the questionnaire correctly and having the awareness of how to deal with survey.

4. Current Job Position: the data in Table (1) demonstrates that the highest percentage of the study sample according to Job Position is located in the group (Employee) with a rate of (71.1%). In contrast, the lowest percentage is positioned in the group (Project Manager) with a rate of (10.6 %). This shows that the sample members have the job in the career ladder that qualifies them to answer the questionnaire items correctly.

5. Work Experience in the Construction field: Table (1) displays that the highest percentage of respondent individuals who have work experience in the construction field are from the category (1 to 4 years), with the rate of (41.9%), followed by the category (21 years and more), with percentage (21.7%). While, individuals with (16 to 20 work experience) came in last place, with the rate (8.3%). This shows that the majority of sample individuals are those who have accumulated experience and sufficient ability to work in the construction field.

6. Location: Table (1) displays the names of location which contains the construction firms. It was found that the major percentage of participants are from Erbil province with the rate (53.0%), while the minority is from Halabja province, with a percentage of (5.7%). This may be due to the fact that Erbil province is the capital of the Kurdistan Region of Iraq and includes many companies, including construction firms.

4.2. Reliability Measurement:

The questionnaire's reliability indicates that it produces the same results when repeated under similar circumstances. It is assessed by calculating the correlation coefficient among the questionnaire items. Therefore, reliability analysis is applied using the Alpha-Cronbach method. The results are acceptable when the value is equal to or greater than (0.60) in management studies (Allen &Yen, 2002), and the results shown in the table (2) of the measurement of study reliability.

- The highest value of the reliability coefficient by the alpha-Cronbach method at the level of variables was recorded for the organizational agility variable and its value is (0.942). But entrepreneurial resilience variable came as the second with a reliability coefficient of (0.936).
- The highest value of the reliability coefficient by the alpha-Cronbach method at the dimensional level is for the responsiveness dimension in the organizational agility variable and recorded (0.841). However, risk tolerance dimension in the entrepreneurial resilience with a reliability coefficient of (0.761) recorded the lowest value of the reliability coefficient by the alpha-Cronbach technique.

Table (2): Reliability measurement through alpha-Cronbach technique

Variable	Dimensions	Items' No	Reliability Value
Entrepreneurial Resilience [ENTRES]	Hardiness [HRD]	**5**	0.805
	Resourcefulness [REF]	**5**	0.803
	Optimism [OPT]	**5**	0.791

	Risk Tolerance [RKT]	**5**	0.761
	Proactiveness [PRC]	**5**	0.781
	Adaptability [ADP]	**5**	0.820
Entrepreneurial Resilience [ENTRES]		**30**	0.936
Organizational Agility [ORGAGIL]	Responsiveness [REV]	**5**	0.841
	Competency [COM]	**5**	0.819
	Flexibility [FLX]	**5**	0.793
	Quickness [QUK]	**5**	0.839
Organizational Agility [ORGAGIL]		**20**	0.942
Over all questionnaire		**50**	.....

Source: Primary data based on (SPSS-26) program.

As can be seen from the table, it is clear that there is the required reliability for the current study questionnaire and through the paragraphs of its variables and dimensions, which is sufficient to adopt the paragraphs of the current questionnaire as a tool for collecting field data.

4.3. Testing the Appropriateness of the Data to Structural Validity:

To determine the appropriateness of the data for confirmatory factor analysis, the Kaiser-Meyer-Olkin (KMO) test is utilized, requiring a minimum value of 0.6, alongside Bartlett's test, which ought to produce a significance level of 0.05 or lower, indicating the data's suitability for factor analysis (Pallant, 2010).

4.3.1. Test Data-Fit of Entrepreneurial resilience Variable for Factor Analysis:

The outcomes of the data fit of the (Entrepreneurial Resilience) variable data for factor analysis, which are presented in the table (3), indicate that the value of the data fit index has reached (0.934), which is a value greater than the standard value of this test, which is (0.60). In addition, the value of Bartlett's Test (Approx. Chi-Square) is equal to (5437.137) with a degree of freedom of (435) and is significant at a significant level of (0.05), consequently it can be concluded that the data of entrepreneurial resilience variable is appropriate for the confirmatory factor analysis test.

Table (3): KMO test for Entrepreneurial Resilience

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.934
Bartlett's Test of Sphericity	Approx. Chi-Square	5437.137
	df	435
	Sig.	.000

P<0.05 N=**387**

Source: Primary data based on (SPSS-26) program.

4.3.2. Test Data-Fit of Organizational agility Variable for Factor Analysis:

The results of the data fit of the (organizational agility) variable data for factor analysis, which are displayed in the table (4), point out that the value of the data fit index has reached (0.956), which is a value greater than the standard value of this test, which is (0.60). In addition, the value of Bartlett's Test (Approx. Chi-Square) is equal to (3967.715) with a degree of freedom of (190) and is significant at a significant level of (0.05), therefore it can be concluded that the data of

organizational agility variable is appropriate for the confirmatory factor analysis test.

Table (4): KMO test for Organizational agility

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.956
Bartlett's Test of Sphericity	Approx. Chi-Square	3967.715
	df	190
	Sig.	.000

P<0.05 N=**387**

Source: Primary data based on (SPSS-26) program.

4.4. Confirmatory Factor Analysis (CFA) for Entrepreneurial resilience:

It can be seen from the figure (2), it is clear that all entrepreneurial resilience item standard parameter estimations exceeded 0.40.

All of the ratios on the arrows connecting sub-dimensions to paragraphs are significant. Because the critical ratio (CR), as indicated by the values in table (5), is more than (2.56), at the level of significance (0.01). This demonstrates the feasibility and validity of the criteria. In terms of model conformity indicators, the results demonstrated, as shown in the structural model, that they all met the acceptance rule assigned to them. Thus, the structural model is highly conformant without alteration indicators. Which reveals that entrepreneurial resilience is measured by (30) questions over six interrelated dimensions, including each of: (Hardiness, Resourcefulness, Optimism, Risk Tolerance, Proactiveness, and Adaptability).

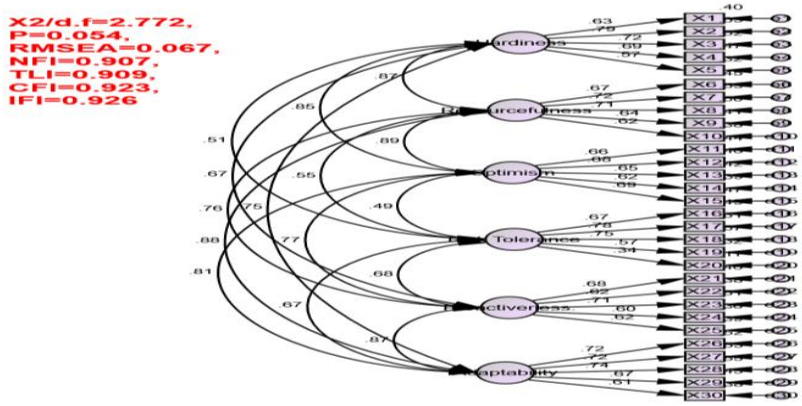

Figure (2): Confirmatory Factor Analysis of Entrepreneurial resilience scale

Source: Primary data based on (AMOS-26) program.

As can be seen from the structural model, the findings for the model conformity indicators demonstrated that each one conformed with the acceptance rule that was given to it, as indicated in table (5):

Table (5): values of parameter estimates, standard error, critical ratio, and level of significance of the Entrepreneurial resilience scale

Items	Estimate	S.E.	C.R.	P-Value	ST. Estimate
X1	0.956	0.083	11.513	***	0.631
X2	1.055	0.074	14.303	***	0.791
X3	1				0.718
X4	0.966	0.077	12.556	***	0.689
X5	0.771	0.074	10.382	***	0.567
X6	0.946	0.076	12.427	***	0.672
X7	0.942	0.070	13.374	***	0.725
X8	1				0.711
X9	0.872	0.074	11.841	***	0.640
X10	0.827	0.072	11.415	***	0.617
X11	1.187	0.108	11.038	***	0.660
X12	1.186	0.105	11.267	***	0.676
X13	1				0.645
X14	1.086	0.103	10.535	***	0.623
X15	1.158	0.102	11.392	***	0.686
X16	0.897	0.074	12.142	***	0.673
X17	1.016	0.074	13.813	***	0.781
X18	1				0.754
X19	0.851	0.083	10.243	***	0.567
X20	0.536	0.088	6.0960	***	0.338
X21	0.986	0.082	12.096	***	0.678
X22	0.797	0.072	11.035	***	0.615
X23	1				0.713
X24	0.734	0.068	10.803	***	0.602
X25	0.891	0.080	11.16	***	0.623
X26	1.036	0.075	13.816	***	0.720
X27	1.013	0.073	13.900	***	0.725
X28	1				0.741
X29	0.884	0.069	12.787	***	0.669
X30	0.820	0.070	11.691	***	0.614

Source: Primary databased on (AMOS-26) program.

4.5. Confirmatory Factor Analysis (CFA) for Organizational agility:

Figure (3) shows that all organizational agility standard parameter estimations exceeded 0.40. All of the ratios on the arrows connecting sub-dimensions to paragraphs were significant. According to the critical ratio (CR) values presented in Table 6, it is evident that the ratio exceeds 2.56 at a significance level of 0.01. This demonstrates the feasibility and validity of the criteria. As seen in the structural model, all model conformity indicators met the acceptance rule. Consequently, the structural model has attained a significant degree of conformity without requiring any proposed modification indicators. Which confirms that the organizational agility variable is measured by (20) items distributed over four interrelated dimensions, which are: Responsiveness, Competency, Flexibility, and Quickness.

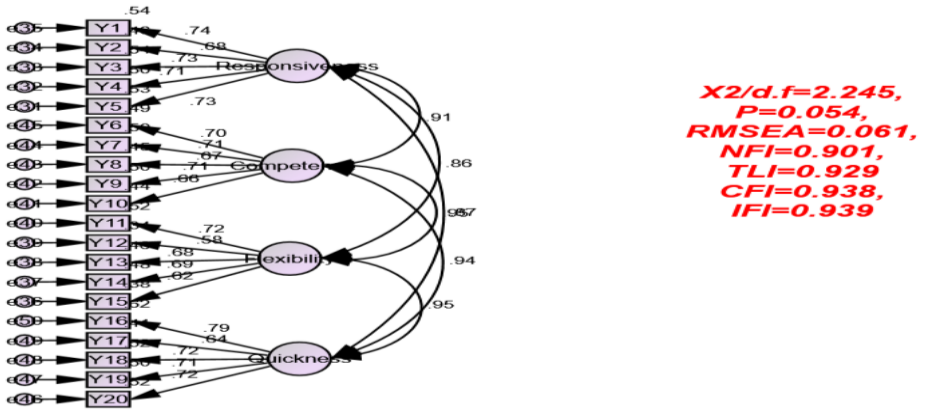

Figure (3): Confirmatory Factor Analysis of Organizational agility Scale

Source: Primary data based on (AMOS-26) program.

The results for the indicators of model conformity demonstrated, as illustrated in the structural model, that all met the established acceptance criteria, as presented in Table 6:

Table (6): values of parameter estimates, standard error, critical ratio, and level of significance of the Organizational agility scale

Items	Estimate	S.E.	C.R.	P-Value	ST. Estimate
X1	0.974	0.070	13.991	***	0.738
X2	0.877	0.068	12.826	***	0.678
X3	1				0.735
X4	1.009	0.075	13.425	***	0.709
X5	0.96	0.070	13.74	***	0.725
X6	1.092	0.088	12.422	***	0.698
X7	1.102	0.088	12.549	***	0.706
X8	1				0.672
X9	1.005	0.08	12.542	***	0.706
X10	0.942	0.08	11.844	***	0.662
X11	1.155	0.09	12.778	***	0.721
X12	0.826	0.078	10.539	***	0.584
X13	1				0.677
X14	1.18	0.096	12.350	***	0.694
X15	0.974	0.088	11.124	***	0.619
X16	1.237	0.083	14.974	***	0.785
X17	1.054	0.086	12.182	***	0.641
X18	1				0.723
X19	0.94	0.070	13.446	***	0.706
X20	1.121	0.082	13.716	***	0.720

Source: Primary databased on (AMOS-26) program.

4.6. Ordinal Importance of the Study Dimensions:

To identify the levels of importance of the research variable as well as their dimensions in the Construction Firms in KRI, and according to the results of the

study's description of variables and their dimensions, the ordinal importance of the Dimensions study variables can be realized.

4.6.1. Ordinal Importance of Entrepreneurial resilience:

It is understandable from the outcomes of the analysis in the table (7), which presents a number of measures of the entrepreneurial resilience variable and its dimensions, represented by the mean, standard deviation, C.V., and rate of agreement, that the rate of agreement for the entrepreneurial resilience reached (76.0). Which indicates that this variable is important from the perspective of the study sample. In addition, table (7) point out the ordinal importance of the dimensions of entrepreneurial resilience, where it is shown that Optimism dimension is the highest with a mean (3.9922), as it has the first rank in relative importance, followed Resourcefulness in second rank in terms of relative importance with a mean (3.9349), and the third rank in relative importance is recorded by Adaptability dimension with a mean (3.9168). As for the last rank, it is related to Hardiness in terms of relative importance with mean (3.5214).

Table (7): Ordinal Importance of Entrepreneurial resilience Dimensions

Item	Mean	S.D	C.V.	A.R	Order	
Hardiness	3.5214	0.59985	17.0	70.4	**6th**	
Resourcefulness	3.9349	0.82468	21.0	78.7	**2nd**	
Optimism	3.9922	0.67895	17.0	79.8	**1st**	
Risk Tolerance	3.5788	0.83379	23.3	71.6	**5th**	
Proactiveness	3.8537	0.69611	18.1	77.1	**4th**	
Adaptability	3.9168	0.73605	18.8	78.3	**3rd**	
Entrepreneurial Resilience	**3.7987**	**0.56429**	**14.9**	**76.0**	**2**	

Source: Primary data based on (SPSS-26) program.

Consequently, the results shown in table (7) confirm the acceptance of the first sub-hypothesis of the second main hypothesis, which states: "**The ordinal importance of the entrepreneurial resilience variable and its dimensions differs according to the nature of reliance on it by construction firms in KRI**."

4.6.2. Ordinal Importance of Organizational agility:

Table (8) indicates the Ordinal importance of Organizational agility dimensions. It is clear that the dimension of Competency has the first rank in relative importance with a mean (3.9282), followed by the dimension of Quickness, which came in second place in terms of relative importance with a mean (3.9111). While, the last rank it is related to Responsiveness in term of relative importance with mean (3.7897).

Table (8): Ordinal Importance of Organizational agility Dimensions

Item	Mean	S.D	C.V.	A.R	Order
Responsiveness	3.7897	0.77466	20.4	75.8	**4th**
Competency	3.9282	0.72191	18.4	78.6	**1st**
Flexibility	3.8341	0.70709	18.4	76.7	**3rd**

Quickness	3.9111	0.87968	22.5	78.2	**2nd**
Organizational Agility	**3.8708**	**0.68528**	**17.7**	**77.4**	**1**

Source: Primary data based on (SPSS-26) program.

Consequently, the outcomes shown in table (8) confirm the **acceptance** of the second sub-hypothesis of the second main hypothesis, which states: "**The ordinal importance of the Organizational agility variable and its dimensions differs according to the nature of reliance on it by the construction firms in KRI**."

Thus, the second hypothesis is **accepted** which states "**the ordinal importance of variables study and its dimensions differs according to the nature of reliance on it by the construction firms in KRI**.

4.7. Testing hypotheses of correlations between study variables

In this section, the findings of testing and analyzing the correlations between the research variables will be discussed, in accordance with the main and sub-hypotheses. To discover the nature of the correlations between the main study variables and interpret their results, this required inferring a correlation coefficient appropriate to the descriptive data, which is embodied from the nature of the study data. To achieve this purpose, the statistical program (AMOS-26) was used to test these hypotheses.

4.7.1. Analyzing the Correlation between Entrepreneurial resilience and Organizational agility

In this section, the nature of the relationship between entrepreneurial resilience and Organizational agility is identified in order to verify the third main hypothesis which states " There is a statistically significant correlation between entrepreneurial resilience and organizational agility at a significance level of ($\alpha \leq 0.05$).

Table (9) and figure (4) shows that there is a significant correlation between entrepreneurial resilience variable and Organizational agility variable, where the value of the correlation coefficient between them is (0.901**), and at a significant level (0.05). This result indicates that there are a significant and high levels of correlation between entrepreneurial resilience variable and Organizational agility variable in the construction firms in KRI. In other words, the more the research construction firms in KRI depend on entrepreneurial resilience, leads to increase the Organizational agility. Therefore, the third main hypothesis is **accepted**, which states that: "**There is a significant and inverse correlation between entrepreneurial resilience and organizational agility at the level of (0.05)**".

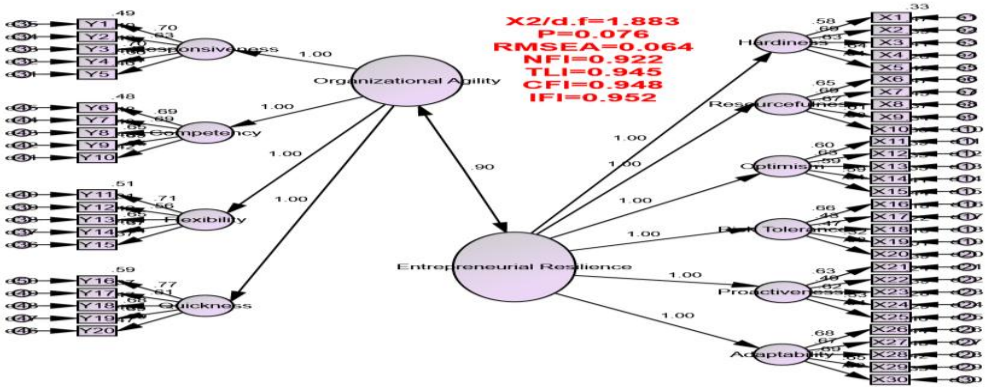

Figure (4): Correlation between entrepreneurial resilience and Organizational agility

Source: Primary data based on (AMOS-26) program.

In order to discover the correlation between the main and sub-variables, tables and a matrix of correlation coefficients between the dimensions of the study variables are used. The significance of the correlation coefficient is confirmed through the quality of the fit to ensure the quality of the structural model for the correlation relationship between the research variables. The following is a test of the hypotheses related to the correlation relationships between entrepreneurial resilience dimensions and organizational agility, as shown in Figure (4) and table (9).

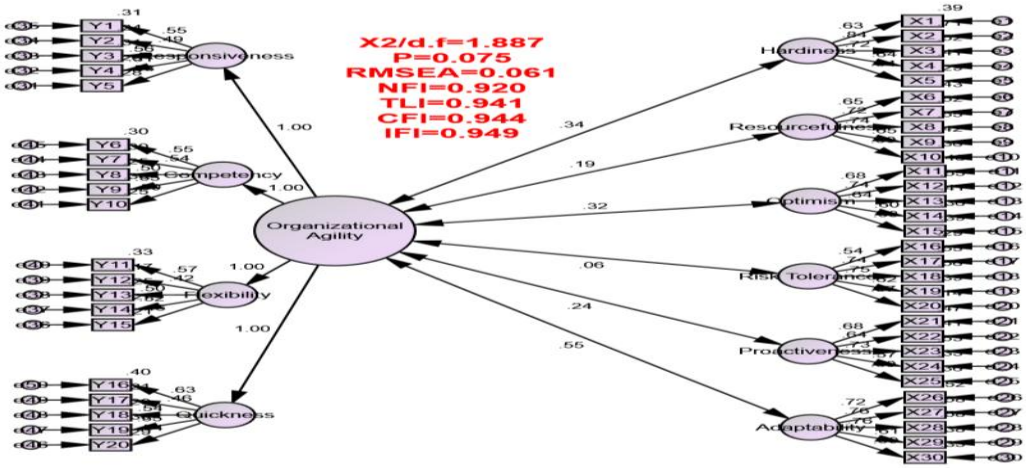

Figure (5): Correlation between Entrepreneurial resilience dimensions and Organizational agility

Source: Primary data based on (AMOS-26) program.

The findings in Table (9) confirm that there is the correlation between entrepreneurial resilience dimensions represented by (Hardiness, Resourcefulness, Optimism, Risk Tolerance, Proactiveness, and Adaptability) and Organizational agility. The value of the correlation coefficient among them are recorded (0.344**),

(0.195**), (0.325**), (0.064), (0.240**), (0.554**) respectively at a significant level (0.05) except the correlation between Risk Tolerance and organizational agility which is very weak and not statistically significant, as the value of the significant level is equal to (0.203), which is higher than the level (0.05) in this study. Hence the (**first**, **second, third, fifth and sixth**) sub- hypotheses of the third main hypothesis are **accepted**. While the fourth sub-hypothesis of the third main hypothesis states: "There is a statistically significant correlation between risk-tolerance and organizational agility at a significance level of ($\alpha \leq 0.05$)" is **rejected**. Then, the alternative hypothesis which states that "**There is no a significant correlation between risk- tolerance dimension and Organizational agility at a significant level of 0.05.**" would be **accepted**

In addition, the **reason** for the weak relationship between risk tolerance and organizational agility can be interpreted by the fact that organizational resilience depends more on factors such as strategic flexibility, responsiveness, and learning orientation, rather than just individual risk preferences. This is supported by Doz and Kosonen (2010), who indicated that an organization's strategic resilience depends on resource flexibility, leadership unity, and strategic sensitivity, not necessarily on risk-taking behavior.

Table (9): Correlation between Entrepreneurial resilience dimensions and Organizational agility

	Organizational agility				
	Standardized Estimate	**Estimate**	**S.E.**	**C.R.**	**Sig. (2-tailed)**
Entrepreneurial Resilience	**.901**	**.381**	**.043**	**8.787**	***
Hardiness	.344	.113	.020	5.727	***
Resourcefulness	.195	.067	.017	3.870	***
Optimism	.325	.081	.015	5.334	***
Risk Tolerance	.064	.021	.017	1.274	.203
Proactiveness	.240	.080	.018	4.453	***
Adaptability	.554	.190	.027	7.162	***

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data based on (SPSS-26) program.

Moreover, it was discovered that the highest value of the correlation coefficient between entrepreneurial resilience dimensions and Organizational agility variable is between Adaptability dimension and Organizational agility variable which is (0.554**) and at a significant level of (0.05). However, the lowest value of the correlation coefficient is between Risk Tolerance dimension and Organizational agility variable which was (0.064).

4.7.2. Testing hypotheses of influence between study variables:

In this section, the fourth main hypothesis which states that: "Entrepreneurial resilience has a statistically significant impact on organizational agility at a significance level of ($\alpha \leq 0.05$)" will be tested. Therefore, the influential relationship between the two main variables was modeled, as Figure (6) shows the

outcomes of testing the influential relationship between entrepreneurial resilience and organizational agility.

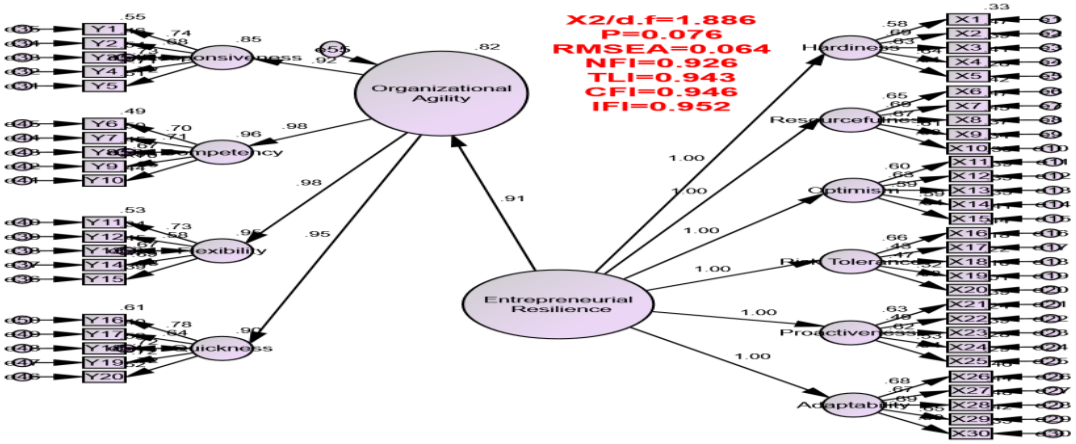

Figure (6) Effect of entrepreneurial resilience on organizational agility at the levels of variables

Source: Primary data based on (AMOS-26) program.

It is vibrant from the Figure (6) that all the conformity quality indicators are within the acceptable limits, while the impact results are shown in Table (10).

Table (10): Effect of Entrepreneurial resilience on Organizational agility

Organizational agility [ORGAGIL]						
	R^2	Standardized Estimate	Estimate	S.E.	C.R.	Sig. (2-tailed)
Entrepreneurial resilience [ENTRES]	**0.81**	**0.91**	**1.014**	**.091**	**11.178**	***

Source: Primary data based on (SPSS-26) program.

Based on the data from Table (10), it is clear to us that entrepreneurial resilience affects organizational agility by a percentage of (1.014) and a standard percentage of (0.91), meaning that every increase of one standard deviation leads to increase of (91%). Once matching the achieved significance level (0.000) with the percentage that assumed by the researcher, which is (0.05), it can be said that the achieved significance level is much smaller. As for the value of the interpretation coefficient (R2) from the table (10), it equals (0.81). This means that (81%) of the changes in Organizational agility are explained by entrepreneurial resilience, and the remaining percentage of the variance is due to other factors which are not included in the current study. According to these findings, the fourth main hypothesis is **accepted**, which states that "**Entrepreneurial resilience has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05)**".

Once testing the fourth main hypothesis, the sub-hypotheses will be tested, which branch off from the effect of the dimensions of entrepreneurial resilience on

organizational agility into six sub-hypotheses according to the results of the multiple regression analysis, assuming the existence of a significant effect of the dimensions of entrepreneurial resilience on organizational agility, and the results of the effect are shown in Figure (7).

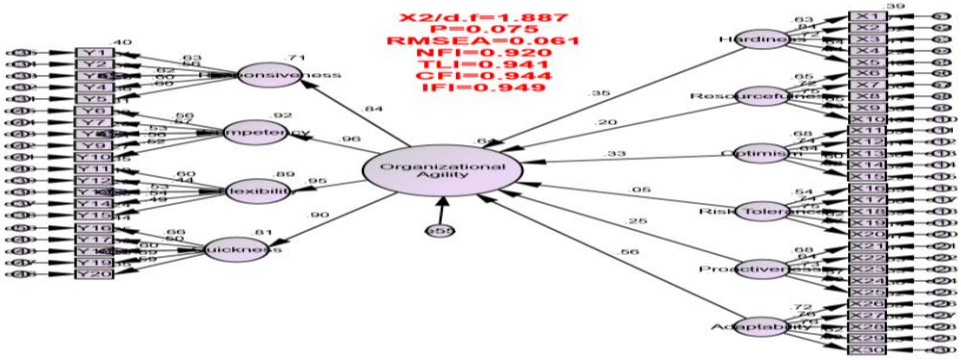

Figure (7): Effect of Entrepreneurial resilience dimensions on Organizational agility

Source: Primary data based on (AMOS-26) program.

In order to comprehend the influence of the dimensions of entrepreneurial resilience on organizational agility, it is essential to find the influence levels for each dimension of entrepreneurial resilience on (Organizational agility). Therefore, the simple regression test was used. The findings of this analysis mentioned in the table (11) show that there is a significant effect of each of the entrepreneurial resilience dimensions except Risk Tolerance dimension on organizational agility.

Table (11): The impact of Entrepreneurial resilience dimensions on Organizational agility

Organizational agility					
	Standardized Estimate	**Estimate**	**S.E.**	**C.R.**	**Sig. (2-tailed)**
Hardiness	.351	.227	.036	6.241	***
Resourcefulness	.201	.122	.030	4.024	***
Optimism	.330	.282	.049	5.738	***
Risk Tolerance	.053	.031	.027	1.140	.254
Proactiveness	.251	.157	.033	4.739	***
Adaptability	.562	.351	.043	8.135	***

Source: Primary data based on (SPSS-26) program.

According to the data from Table (11), it is obvious that there are six dimensions of entrepreneurial resilience which its influence on organizational agility is tested, and the test results are as follows:

1. The first sub-hypothesis: This hypothesis states that "Hardiness has a statistically significant impact on organizational agility at a significance level of ($\alpha \leq 0.05$)". Based to the results of Table (11), it is clear that Hardiness has impact on organizational agility when the percentage equal to (0.351), as well as once matching the achieved significance level (***) with the percentage assumed by the

researcher, which is (0.05), it can be found that the achieved significance level is much lower, hence according to these findings, this hypothesis is **accepted**.

2. The second sub-hypothesis: This hypothesis states that "Resourcefulness has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05)." According to the information of Table (11), Resourcefulness affects organizational agility by a percentage of (0.201), as well as it is statistically significant (***) which is smaller than (0.05), therefore, this hypothesis is **accepted**.

3. The third sub-hypothesis: This hypothesis states that "Optimism has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05)" According to the data of Table (11), Optimism affects organizational agility by a percentage of (0.330), as well as it is statistically significant (***) which is smaller than (0.05), therefore, this hypothesis is **accepted**.

4. The fourth sub-hypothesis: This hypothesis states that "Risk-Tolerance has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05)" According to the data of Table (11), Risk-Tolerance has a very small impact on organizational agility by a percentage of (0.053), as well as there is no significance level which is (0.254) and is bigger than (0.05), therefore, this hypothesis is **rejected**.

As a researcher, it is important to Interpret the insignificant and very small impact of risk tolerance on organizational agility. The weak and insignificant effect of risk tolerance on organizational agility can be justified by the fact that the willingness of individuals or organizations to take risks does not necessarily increase the ability to rapidly adapt or reshape in changing environments. This is because organizational agility relies more on strategic sense, operational flexibility, rapid response, and the ability to learn, rather than on risk-taking behaviors. This is supported by Tallon et al.'s (2019) study, which emphasized that agility stems from an organization's ability to process information, develop dynamic capabilities, and accelerate decision-making, which do not necessarily require a high level of risk tolerance.

5. The fifth sub-hypothesis: This hypothesis states that "Pro-activeness has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05)." According to the information of Table (11), Pro-activeness affects organizational agility by a percentage of (0.251), as well as it is statistically significant (***) which is smaller than (0.05), therefore, this hypothesis is **accepted**.

6. The sixth sub-hypothesis: This hypothesis states that "Adaptability has a statistically significant impact on organizational agility at a significance level of (α≤ 0.05)." According to the information of Table (11), Adaptability affects organizational agility by a percentage of (0.562), as well as it is statistically significant (***) which is smaller than (0.05), therefore, this hypothesis is accepted.

4.8. Discussion

This study provides significant theoretical and practical contributions by investigating the relationship and impact of entrepreneurial resilience on

organizational agility in construction firms located in the KRI. The findings show a statistically significant relationship between these two variables, providing important insights into how resilient leadership affects an enterprise's ability to adjust rapidly and efficiently to shifts in a highly dynamic sector. The main results of this study revealed that there is a statistically significant correlation between entrepreneurial resilience and organizational agility. The results also discovered that entrepreneurial resilience has a statistically significant impact on organizational agility. Due to variances in all the demographic characteristics of the respondents, there are no statistically significant differences between the construction companies that were surveyed in terms of the variables that were being studied.

4.8.1. Similarities and Differences

Organizational agility and entrepreneurial resilience have not been examined together in any of the reviewed research, particularly when it comes to construction companies. This makes it hard and difficult to directly compare and contrast the results of this study with prior literature. Furthermore, different studies have employed distinct dimensions of entrepreneurial resilience, which further restricts comparability and emphasizes the distinctiveness of this study. The main results of this study discovered that except for the risk-taking component, all dimensions of entrepreneurial resilience (optimism, resourcefulness, adaptability, proactiveness, and hardiness) had statistically significant impacts and relationships with organizational agility. These results align with the results reported in the prior literature conducted by (Ayala & Manzano, 2014; Rani *et al.,* 2019; Emueje *et al.,* 2020; Iringe-koko & Onuoha, 2023; Amadi & Nwokah, 2024, and Omar *et al.,* 2024). As they discovered that optimism, resourcefulness, adaptability, proactiveness, and hardiness had a substantial and beneficial impact on the performance and development of enterprises.

In addition, the result of this study discovered that there is no a significant correlation between risk- tolerance dimension and organizational agility. This contrasts with the results of Oiku and Akanbi (2023), who determined that risk-taking capability greatly enhances organizational resilience by allowing organizations to recognize new market opportunities and maintain stability throughout adversities, thus fostering innovation. However, the findings are consistent with Sadikin *et al.* (2023), who revealed that while self-efficacy and entrepreneurial motivation significantly impacted entrepreneurial intention, risk tolerance did not have a substantial influence. These mixed results imply that the role of risk tolerance may differ depending on the particular organizational setting or outcome under investigation, emphasizing the need for additional study in this area.

The main results revealed that, there is statistically significant relationship between organizational agility and its sub dimensions specifically (competency, quickness, flexibility, and responsiveness). These results are in line with finding of (Chamanifard *et al.*, 2015; Oktay, 2020; Koçyiğit & Akkaya, 2020; and Khalaf *et al.*, 2024). As they discovered that there is statistically significant and positive

relationship between organizational agility and its sub dimensions in different contexts, sectors and participants. While the findings of Mgbemena *et al.* (2024) reveal that organizational agility has a significant and substantial link with customer retention. The study further indicated that, among the dimensions of agility, speed and competence positively influenced customer retention, whereas flexibility demonstrated a negative link with it.

5. Conclusion

The main objective of this study is to examine the role of entrepreneurial resilience in enhancing organizational agility in construction firms in the KRI. This study's primary findings indicated a statistically significant correlation between entrepreneurial resilience and organizational agility. The findings showed that organizational agility is statistically significantly impacted by entrepreneurial resilience. The results also revealed that while the risk tolerance dimension of entrepreneurial resilience has no statistically significant impact on organizational agility, others like optimism, resourcefulness, adaptability, proactiveness, and hardiness dimensions had a statistically significant impact on organizational agility. From the several dimensions of organizational agility, the one that received the greatest ratings was competency, followed by quickness and flexibility, and responsiveness received the lowest rating. These findings emphasize the significance of cultivating resilient leadership, as it endows businesses with the mental fortitude, adaptability, and proactive mentality essential for navigating uncertainty, overcoming problems, and making prompt, effective decisions. In rapidly changing and high-risk sectors such as construction, resilience directly enhances organizational agility, allowing firms to swiftly adapt to changes, capitalize on emerging opportunities, and sustain a competitive advantage.

5.1. Recommendations

It is advised that construction enterprises in the KRI enhance entrepreneurial resilience by cultivating essential aspects such as optimism, resourcefulness and adaptability, which shown the most substantial beneficial influence on organizational agility. These qualities can be strengthened with the aid of strategic planning, encouraging work environments, and leadership training. Enhancing organizational competency, which has been found to be the strongest agility dimension, should also be a primary goal through information exchange, effective procedures, and ongoing skill development. Despite the fact that risk tolerance and responsiveness were the least effective factors, businesses shouldn't ignore them. Instead, companies could take managed risks and improve responsiveness by improving communication, making decisions more quickly, and actively engaging stakeholders. These efforts, when combined, have the potential to produce construction companies that are more robust and adaptable, allowing them to thrive in an environment that is both tough and uncertain.

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