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## Entrepreneurial Opportunity Identification: Integrating Risk, Expertise, social media, Self-Efficacy, and Digital Literacy

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#### Abstract

The dynamic and evolving nature of entrepreneurial environment in the current times makes a sophisticated grasp of the variables affecting opportunity identification imperative. The current study examined the complex links between past knowledge, a tendency towards taking risks, and social media utilization in the context of identifying business opportunities. According to the study, selfefficacy plays a critical mediating role in determining the effect of these independent characteristics on the recognition of entrepreneurial possibilities. Additionally, the study also investigated the influence of digital literacy on the character and strength of these interactions in a moderating way. The suggested study used a mixed-methods approach, combining explanatory questionnaires, a quantitative methodology, and positive epistemological philosophy to capture the complexity of entrepreneurial thought and action. Small-business owners and entrepreneurs from Baluchistan constituted the study's population. Two hundred and twenty (220) entrepreneurs were selected randomly as the study sample. Respondents were given surveys using Google Forms to collect the data. Validity and reliability tests were conducted on the instruments. Following data collection, descriptive, correlation, and regression analyses and Hayes test were performed on the acquired data using SPSS. The findings suggested that: 1) the identification of entrepreneurial opportunities is positively and significantly impacted by prior understanding, social media use, and entrepreneurial self-efficacy. 2) However, the tendency to take risks causes a non-significant and detrimental impact on the discovery of entrepreneurial opportunities. 3) Self-efficacy positively mediates the correlation between entrepreneurial opportunity identification, social media use, and prior knowledge. 4) The moderation study shows that digital literacy doesn't significantly modify the association between entrepreneurial self-efficacy and entrepreneurial opportunity identification. The findings would provide insights into the processes that underlie the detection of entrepreneurial possibilities. Moreover, the findings would also have useful ramifications for future business owners, instructors, and legislators. The current study offered a contemporary examination of the cognitive and environmental aspects impacting the recognition and pursuit of entrepreneurial possibilities, since the entrepreneurial landscape is ever evolving in a world that is becoming more digitally connected.

*Keywords*: digital literacy, entrepreneurial opportunity identification, entrepreneurial self-efficacy, prior knowledge, risk-taking propensity, social media use

#### Introduction

An idea is the first step to identify an opportunity and the next step is to assess this notion. Consequently, an idea is not yet an opportunity, however, it is a prerequisite to recognize one (Khalid & Sekiguchi, 2018). Other scholars, such as Short et al. (2010), Ramoglou and Tsang (2016), implied that some opportunities are discovered, while others are created. Similarly, scholars agree and believe that there are two categories of opportunities: creative and arbitrage. Innovative possibilities may be identified by developing novel means or goals, whereas arbitrage opportunities arise as a result of market inefficiency (Shin & Lee, 2013).

According to Sarasvathy (2001) and Shane and Venkataraman (2000), entrepreneurs play an essential role in generating and spotting business possibilities in dynamic situations. The Oxford English Dictionary defines opportunity as "A group of circumstances which make it possible to

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achieve something". Despite the importance of opportunity discovery, there are a few researches and conflicting findings about the opportunity identifying process (Yitshaki & Kropp, 2018).

The current study added a theory on opportunity identification process to the body of research pertaining to entrepreneurial opportunities. The dominant views that characterize opportunities as either created or discovered create a dichotomy; on the other hand, a moderate perspective acknowledges both components. (Alvarez & Barney, 2007; Short et al., 2010). An opportunity is, at its core, a thought or idea that an entrepreneurial group finds, investigates, and finally decides and has the potential to be profitable (Short et al., 2010). According to Eckhardt and Ciuchta (2008), the process of becoming an entrepreneur is evolutionary and the available options are ever-changing.

The current study aimed to explore various aspects of discover for entrepreneurship. A few of the specific objectives are mentioned as follows:

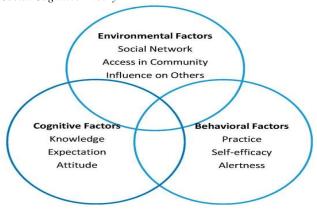
- 1. To examine the relationship among social media use, a propensity for taking risks, and prior knowledge as it relates to finding business prospects.
- 2. To examine how self-efficacy, being the entrepreneur, mediates the association between the process of identifying business prospects and the acknowledged independent attributes.
- To examine various ways in which digital literacy affects the relationships between prior knowledge, a propensity for taking risks, social media use, self-efficacy within entrepreneurship, and the ability to recognize business prospects.

Finally, by exploring the complex interactions among these factors, the current study added to the knowledge of how entrepreneurs identify, generate, and seize the opportunities in the fast-paced and digitally-driven world of modern business.

#### Literature Review

Since establishing a business involves spotting and seizing opportunities, entrepreneurial possibilities are crucial for those wishing to launch a venture (Shane & Venkataraman, 2000). Consequently, a key component of entrepreneurship is the ability to recognize and seize opportunities. For those who want to start their own companies and improve their financial performance, this procedure can be difficult. Numerous studies have looked into how and when entrepreneurs spot opportunities and take advantage of them by utilizing the tools at their disposal (Alvarez et al., 2013; Li et al., 2015; Nieto & Gonzalez-Alvarez, 2016; Short et al., 2010.

Figure 1
Three Components of Social Cognitive Theory



## **Theory of Social Cognition**

Social cognition hypothesis, developed by Bandura (2001), offers a reciprocal causality model to explain the psychological behavior of people. According to the idea, an individual's behavior patterns are determined by a constant interplay of behavioral, cognitive, and contextual elements (McCormick & Martinko, 2004). Skill, practice, and self-efficacy are the examples of behavioral characteristics which affect an individual's beliefs and actions. Cognitive variables, usually referred to as personal factors, include expectations for the future, attitudes, and past knowledge.

Numerous academic fields have employed the social cognitive theory to examine various facets of businesses including employee behavior, organizational decision-making processes, and the adoption of technology innovations (Chan & Lu, 2004).

## **Opportunity Identification (Entrepreneurial Opportunity Identification)**

According to Casson (1982), Shane and Venkataraman (2000), and Shane and Eckhardt (2003), among others, entrepreneurial opportunities are circumstances in which there is a possibility to create novel products, services, supplies, and markets as well as organizing techniques through the development of innovative means and ends along with means—ends relationships. In contrast to typical decision-making processes, entrepreneurs frequently create the means or the objectives, or both, using their creativity.

Individuals exploiting opportunities is what drives the entrepreneurial process, both domestically and internationally (Shane et al., 2003). Numerous studies have looked into opportunities' numerous aspects and shown how important they are to the concept of entrepreneurial endeavor (Short et al., 2010). According to Ireland et al. (2005), McMullen et al. (2007), and Short et al. (2010), recent researches have focused explicitly upon the recognition, identification, discovery, envisioning, as well as the development of entrepreneurial potential.

According to two dominant schools of thinking, opportunities are either generated or found (Alvarez & Barney, 2007). According to some academics, opportunities are the end result of a slow, creative process that involves the gradual synthesis of thoughts over a period of time (Dimov, 2007). There are several ways to define opportunities. Gaglio (2004) defined opportunities as chances to launch novel products, services, or procedures.

## **Hypotheses Formulation**

Based on earlier studies, hypotheses are created to explain every relationship in the model. After conducting more analysis and making revisions to the study's design, it has been concluded that none of the originally suggested variables had any meaningful interactions. The study instead focused to investigate how these variables directly affect the identification of entrepreneurial opportunities and entrepreneurial self-efficacy.

## Prior Knowledge (Cognitive Component)

Venkataraman (1997) posits that an individual's unique past experiences form a "cognitive pathway" that empowers them to identify and seize specific chances while excluding the others. Due to this, even if many individuals may access information about a technical advance, only a selected few would have the background knowledge necessary to identify and seize an entrepreneurial opportunity.

The current study focused on the peculiarities of entrepreneurial and personal knowledge, which arise from particular applications of education, job experiences, or life experiences (Venkataraman, 1997). The course of entrepreneurship is not entirely explained by external factors, such as competition, due to the significant role that individuals play in it. Shane (2003) states that having past start-up experiences, industry understanding, functional competence in advertising, development

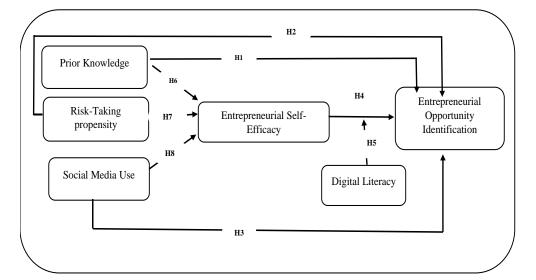
of products, and management, or general business experience may help an individual's chance to seize opportunities.

Politis (2005) noted that experience gained over time impacts the type of learning which takes place in an entrepreneurial setting, since the entrepreneurs are aware of where to seek. Those who have previously launched their own enterprises are more inclined to seize entrepreneurial chances. An entrepreneur's uncertainty and risk aversion about upcoming endeavors are lessened by this understanding. Therefore,

Hypotheses 1 (H1): There exists a favorable correlation between past knowledge and the capacity to recognize entrepreneurial opportunities.

Figure 2

Hypothetical Model



## Risk-Taking Propensity

An individual's risk-taking tendency is conceptualized as the likelihood that they would experience the benefits of a proposed situation's success, which they must perceive before exposing themselves to the negative effects of failure; the alternative scenario offers both less rewards and less serious consequences as compared to the proposed situation. This term might accurately characterize the circumstances that confront a prospective entrepreneur seeking to launch a new company endeavor (Brockhaus, 1980).

Stewart and Roth (2001) described risk propensity as the product of an event's probability, the likelihood of related outcomes, and the variation in a subjectively distribution function. Stated differently, risk propensity may be defined as the cognitive predisposition to profit, which is an essential component of success in hypothetical situations when the alternative possibilities lead to even worse results and lower profit (Brockhaus, 1980).

According to previous research, entrepreneurs may choose to take various risks and make different judgments resultantly (Hadida & Paris, 2014). An entrepreneur inclined towards high risk may select an industry laden with danger. Therefore,

Hypothesis 2 (H2): The propensity to take chances and the aptitude to see opportunities in business are highly correlated.

## Social Media Use

Aichner et al. (2021) stated that there has been a discernible increase in the number of social media sites and frequent users of SM over time, establishing it as essential Internet applications. The customer is no longer an opponent or audience. In the research conducted on social media, a wide variety of online platforms are referred to as "social media", that is, blogs, corporate networks, social media games, forums, micro blogs, photo sharing, product evaluations, social bookmarking, social networking, video sharing, and worlds of virtual reality (Aichner & Jacob, 2015). Approximately, 110,000 articles have used the term "social media" in their titles (Aichner et al., 2021).

According to Kaplan and Haenlein (2010), social media (SM) is "a set of applications developed over the Internet which expand over the conceptual and technological underpinnings in Web 2.0, and encourage the production and distribution of user-generated content". Entrepreneurs utilize social media for a variety of purposes since it is crucial to their business operations. Social media's transparency and interconnectedness enable entrepreneurs find and get in touch with experts when they need assistance (Kuhn et al., 2016). This is especially important in the early phases of entrepreneurship while launching and maintaining a company. Additionally, business owners mostly use social media to promote their goods and services. Therefore,

Hypotheses 3 (H3): The identification of entrepreneurial opportunities is closely associated with social media usage.

## Entrepreneurial Self-efficacy

In this context, the particular kind of entrepreneurial self-efficacy is focused. As Drnovsek et al. (2010) explain, it reflects a person's confidence in their capacity to succeed within entrepreneurship and the belief in their abilities to fulfill various responsibilities and duties related to it, such as discovering opportunities for new businesses, using creativity, and developing innovative goods or services. A minimal degree of entrepreneurial self-efficacy is necessary to take entrepreneurial action, according to theoretical frameworks and current empirical research (Frese 2009; Townsend et al., 2010).

It has been demonstrated that, among other entrepreneurial outcomes, entrepreneurial selfefficacy influences venture success and development (Baum & Locke, 2004). Furthermore, a number of earlier studies looked at the relationship between environmental factors and entrepreneurial selfefficacy as predictors of entrepreneurial results (Hmieleski & Corbett, 2008). Tang (2008) discovered that environment munificence—that is, the degree to which the environment fosters continuous growth—is an indicator of entrepreneurial alertness, particularly for entrepreneurs having a high degree of entrepreneurial self-efficacy.

On the other hand, entrepreneurs that lack assurance in their skills could struggle to satisfy the high expectations of increasing unpredictability. They, therefore, have a greater propensity to reduce or avoid research. Additionally, they are more likely to continue their research when they sense that the surroundings are less ambiguous (Schmitt et al., 2018).

#### Relationship: Self-efficacy in Entrepreneurship and Entrepreneurial Opportunity Identification

According to Newman et al. (2019), Entrepreneurial Self-efficacy (ESE) encourages entrepreneurship, based on actual data. Still, not much is known about the mechanisms by which the psychological resources or personality traits of entrepreneurs, such as, ESE affect their entrepreneurial activities (Shane, 2003). ESE may also operate as a springboard for business endeavors on a national and worldwide scale. Since entrepreneurs are more likely to be driven to seek for business possibilities outside than domestically, the likelihood that the potential for entrepreneurial globally will materialize depends on this. The current study focused on the indirect impacts of ESE on the globalization of entrepreneurial enterprises through opportunity-motivated entrepreneurship in accordance with action theory (Frese, 2009).

It has been contended that ESE has a major impact on entrepreneurs' incentives, based on the action theory of entrepreneurship. However, in contrast, it may result in entrepreneurship motivated by both necessity and opportunity. Resultantly, it has been argued that an individual with a high ESE has great confidence in their resources and abilities to generate and seize a business opportunity. Therefore.

Hypotheses 4 (H4): Identification of business opportunities is strongly correlated with entrepreneurial self-efficacy.

## **Digital Literacy**

The phrase "digital literacy" was introduced in 1997 with the publication of Paul Gilster's book 'Digital Literacy'. Gilster's seminal work fostered the critical thinking abilities required to manage information in a culture that is becoming more and more digital (Pangrazio et al., 2020).

Since the corporate world and society are becoming more digitally connected, people with digital talent are prioritized, meaning that their abilities advance at a pace that matches technology innovation (Chetty et al., 2018).

An individual's capacity to use ICT and the Internet to accomplish goals is referred to as 'digital literacy'. According to Martin (2006), digital literacy encompasses specific factors, for instance "...the knowledge, disposition, and capacity of people to suitably utilize digital instruments and amenities to recognize, access, oversee, integrate, assess, and combine digital resources. Moreover, it also includes building new understanding, generating media representations, and interacting with people within particular life circumstances, to facilitate positive social engagement; and to contemplate this procedure" (p. 155). Consequently, the study postulated that digital literacy would lead towards self-efficacy. Therefore,

Hypotheses 5 (H5): Self-efficacy and opportunity identification are positively correlated, with digital literacy acting as a moderator.

## **Entrepreneurial Self-efficacy and Prior Knowledge**

According to Krueger (1998), self-efficacy is the conviction and motivation to successfully accomplish particular goals and activities. A person's perspectives reveal their willingness to recognize possibilities. People with strong self-efficacy and a history of achievement are more likely to be motivated to look for possibilities (Pech & Cameron, 2006). Research has indicated that an increased level of self-efficacy is linked to a better capacity to recognize opportunities towards entrepreneurship (Ozgen, 2003). A person's mental schema is influenced by their prior knowledge.

Moreover, according to Shane and Venkataraman (2000), there are two primary criteria that influence whether or not entrepreneurs find specific opportunities: information corridors and cognitive qualities. Mental schemas, which structure a person's perception of new opportunities, are highlighted by both information corridors and cognitive qualities. While, the information people have might be thought of as past knowledge and experience, cognitive abilities rely on the information they already had. Ozgen (2003) and Ucbasaran et al. (2009) stated that empirical research has shown that identifying entrepreneurial possibilities is strongly correlated with prior knowledge and experience. Therefore,

Hypotheses 6 (H6): Entrepreneurial self-efficacy is significantly correlated with prior knowledge.

## Risk-Taking Propensity and Entrepreneurial Self-efficacy

While many academics have given varied definitions of self-efficacy, those who deal with the idea most likely use Albert Bandura's (1977) definition. Bandura (1977) described self-efficacy as "an individual's belief in one's capability of organizing and carrying out the courses that are required for accomplishing given attainments" (p. 3). Nevertheless, the tendency to take risks has been identified as a person's perceived likelihood to receive the benefits linked with a positive outcome of a proposed circumstance, which is necessary prior to he is going to subject himself to the consequences associated with failure, a substitute situation offering a lesser reward alongside fewer serious consequences in comparison with the proposed situation (Brockhaus, 1980).

Crucially, the current research also included a section that compares self-efficacy among entrepreneurs with that of non-entrepreneurs. According to Macko and Tyszka (2009), entrepreneurs have the greatest levels of self-efficacy among the categories they look at. This is consistent with the findings of earlier researches that examined the connections between self-efficacy and entrepreneurship. Although, taking chances may be considered as a necessary step in that journey, entrepreneurs can only feel comfortable taking risks when they have self-efficacy. Therefore,

Hypotheses 7 (H7): The propensity to take risks and entrepreneurial self-efficacy are significantly correlated.

## Social Media Usage and Self-efficacy in Entrepreneurship

Self-efficacy is the degree to which an individual acts in ways that are consistent with their beliefs about themselves and their capacity to complete challenging tasks (Dickson et al., 2013). Social media as well as web 2.0 are terms that are frequently used interchangeably (Kadam & Ayarekar, 2014). According to Shabbir et al. (2016), there are many different types of social media platforms including blogs, microblogs, and private and public social networks. Facebook, Instagram, Twitter, LinkedIn, WhatsApp, Viber, and Skype are a few of the well-known and often used social networking sites. Moreover, other platforms and social media sites include WordPress, the website YouTube, Flikr, Google+, Pinterest as well as Quora, Reddit, and the Snapchat app. Despite the fact that social media was initially introduced in 1997 (Shabbir et al., 2016), its use among the users of social networks increased significantly in 2000 (Kadam & Ayarekar, 2014). Thus, the platform may provide opportunities to attract new clients and retain existing ones in order to develop the relationship among the individuals involved (Mangold & Faulds, 2009). Therefore,

Hypotheses 8 (H8): The use of social media and self-efficacy of an entrepreneur are significantly correlated.

## Methodology

The current study was quantitative in nature and data was collected from 220 Quetta-based entrepreneurs, small business owners, and employees working in these entrepreneurial businesses. Survey forms were collected from company owners based in the University of Baluchistan and BUITEMS business incubation facilities. In addition to office space, these organizations' business incubation centers offer auxiliary services, such as coaching and training to help entrepreneurs launch and grow their enterprises. Data on 220 people in total was collected. The research respondents were given two options to disseminate the questionnaires they needed to fill out: (A) the authors went to the participants' place of employment and distributed the questionnaires. (b) the questionnaires were distributed to the respondents using online Google Forms to every section of Quetta. Our study employed a survey distribution and collection strategy that involved the use of individual questionnaires. It was made clear that respondents would not receive any payment and that participation was completely voluntary. The survey was accessible for one month, from November 15th. 2023, to December 15, 2023.



#### Instrumentation

All survey items were evaluated using a 7-point Likert scale, with the possible exception for the demographic section. The items were created and taken from earlier studies.

Entrepreneurial Opportunity Identification: To create four items for the identification of entrepreneurial opportunities, Gielnik et al. (2014) study and measuring techniques are referred mainly.

*Prior Knowledge:* The prior knowledge items were developed using the three-item Ozgen (2003) measure of previous knowledge (Cronbach's alpha = 0:89).

*Propensity to take Risks:* The risk propensity questionnaire was modified via Sitkin and Pablo (1992). It comprises four items upon a five-point Likert scale, with 1 denoting *strongly disagree* and 5 denoting *strongly agree*.

Social Media Use: The four social media measurement elements were adopted using three research factors: 1) utilitarian value source adopted by Voss et al. (2003), 2) Hedonic value (HV) by Voss et al. (2003), 3) Social media use for work (SMUW) factor by Kankanhalli et al. (2005).

Self-efficacy in Entrepreneurship: Eight components of Chen et al. (1998)'s scale were used to evaluate the influence of ESE on them. The participants were asked to rate their answers on each topic on a Likert scale with scores of 1-5, where 5 represented strongly agreed and 1 represented strongly disagreed.

*Digital Literacy:* 6 queries on a 5-point Likert scale were used to measure the impact of digital literacy, developed by Riduwan and Engkos (2011).

#### Results

Table 1 summarizes the results of correlation analysis together with the means and standard deviations. Each scale's Cronbach's alpha reliability (inter-item consistency) value is provided in the upper diagonal row of each column corresponding to that variable.

 Table 1

 Correlation Analysis of Entrepreneurial Opportunity Identification

	1	2	3	4	5	6
1.Entrepreneurial opportunity identification	.423					
2.Prior knowledge	.48*	.423				
3.Risk-taking propensity	04	.06	.387			
4. Social media use	03	09	.32	.430		
5.Entrepreneurial self-efficacy	.88	.81**	.03	06	.675	
6. Digital literacy	07	.01	.89**	49**	01	.623
Mean	4.80	4.83	4.78	4.70	4.84	4.79
Standard deviation	.24	.243	.251	.271	.181	.211

**Note.** \*\* Correlation is significant at 0.01 Level (1-tailed). \* Correlation is significant at 0.05 Level (1-tailed). N=220

For EOI, PK, RTP, SMU, ESE, and DL, the corresponding means and standard deviations are 4.80(.241), 4.83(.243), 4.78(.251), 4.70(.271), 4.84(.181), and 4.79(.211), respectively. The Cronbach's alpha ratings of the research variables show different degrees of internal reliability and consistency. Having alpha readings of 0.423, 0.423, and 0.387, respectively, the Entrepreneurial Opportunities Identification (EOI), Previous Knowledge (PK), and Risk-Taking Propensity (RTP) measures all show moderate to high reliability. With an alpha score of 0.430, which is quite high,

usage of social media appears to have a decent internal consistency. The Cronbach's alpha value of ESE was enhanced to 0.675 when the measuring scale was refined, showing a satisfactory degree of internal consistency. The alpha value of 0.623 for digital literacy (DL) is comparatively high, suggesting a strong internal consistency. While, the scales for EOI, PK, RTP, and SMU may be regarded as trustworthy.

In the context of identifying entrepreneurial opportunities (EOI), a correlation analysis performed on the given data provides insights into the correlations among variables. There is a positive association (r = 0.479, p < 0.05) between previous knowledge (PK) and entrepreneurial opportunity identification (EOI). This suggests that those with a higher prior knowledge are more inclined to recognize entrepreneurial possibilities. The association between inclination to take risks and earnings over time (EOI) is weak and not statistically significant (r = -0.044). This suggests that there is no discernible relationship between risk-taking and opportunity identification. The study found a moderately favorable connection (r = 0.323, p < 0.01) between social media usage (SMU) and entrepreneurial opportunity identification (EOI). This suggests that more social media participation is linked to a higher propensity to recognize entrepreneurial possibilities. The results indicate a noteworthy positive association (r = 0.881, p < 0.01) between entrepreneurial self-efficacy (ESE) and opportunity identification (EOI). The relationship between DL and ESE is shown to be negative (r = -0.485, p < 0.01), indicating a tendency for self-efficacy to decline with increasing DL. The upper diagonal row's Cronbach's alpha ratings for each scale show that the measuring scales have a high level of internal consistency and reliability.

## Structural Analysis (Regression & Hayes test)

Table 2
Regression Analysis of Entrepreneurial Opportunity Identification

Hypothesis	Unstandardized β	t	Sig.	$R^2$	F	Sig. (F)
1. PK =►EOI	.437	8.058	.000	.230	64.933	.000
2.RTP=►EOI	043	656	.512	.002	.430	.512
3.SMU=►EOI	030	17.793	.000	.034	.259	.611
4.PK=►ESE	.807	13.884	.000	.685	192.770	.000
5. RTP=►ESE	.739	8.160	.000	.484	66.578	.000
6.SMU=►ESE	.707	7.980	.000	.475	63.681	.000

Table 3
Haves test: Mediator and Moderator (Prior knowledge)

Hypothesis	B	t	Sig.	$R^2$	F	p
Outcome variable				.6612	425.49	.0000
Constant	-2.9951	-20.601	.0000			
Prior knowledge	.6193	20.6274	.0000			
Moderator: EOI				.9445	914.0	.0000
Constant	8.1427	61.4574	.0000			
Prior knowledge	6914	-25.24	.0000			
Entrepreneurial self-efficacy	1.8806	52.359	.0000			
Digital literacy	0472	-2.5635	.0110			
Interaction (ESF × DL)	.1252	.9468	.3448			

**Table 4**Hayes test: Mediator and Moderator (Risk taking Propensity)

Hypothesis	В	t	Sig.	$R^2$	$\boldsymbol{\mathit{F}}$	р
Outcome variab	le: ESF			.0011	.2385	.6258
Constant	1179	4877	.6263			

Hypothesis	B	t	Sig.	$R^2$	F	p
RTP	.0247	.4884	.6258			
Outcome variable	le: EOI			.7823	192.770	.0000
Constant	5.3047	16.4740	.0000			
RTP	1058	-1.5716	.1175			
ESF	1.1490	27.6746	.0000			
DL	.0482	.6187	.5368			
ESF x DL	1105	4228	.6729			

**Table 5**Hayes Test: Mediator and Moderator (Social Media Use)

Hypothesis	В	t	Sig.	$R^2$	F	р
Outcome variable: ESF				.0036	.7781	.3787
Constant	.1882	.8806	.3795			
Social media use	0400	8821	.3787			
Outcome variable: EOI				.7824	193.3018	.0000
Constant	4.5559	30.4126	.0000			
Social media use	.0516	1.6235	.1059.			
Entrepreneurial self- efficacy	1.1463	27.7168	0000			
Digital literacy	0930	-2.2278	.0269			
ESF x DL	0718	2743	.7841			

#### Discussion

The findings looked at the moderating role of DL as well as the impact for PK, RTP, SMU, and ESE. These results further strengthen the comprehension of EOI. Both supported and unsupported hypotheses were discussed. The study demonstrated that prior experiences and expertise are crucial for entrepreneurs starting new enterprises in terms of identifying opportunities and projecting performance (Cassar, 2014). The results revealed that PK and the discovery of entrepreneurial opportunities are positively correlated, which supports the first hypothesis that those who possess a greater depth of understanding in pertinent fields are more likely to identify and seize entrepreneurial chances. This highlights the importance of expertise in bringing potential business prospects to light. The study refuted the second hypothesis, which postulated a negative correlation between the propensity for taking risks and the discovery of entrepreneurial opportunities, contrary to expectations. The lack of a significant correlation implies that, in the context of this investigation, the degree of RTP has no discernible impact on the recognition of entrepreneurial chances. This goes against the grain and necessitates a more thorough investigation of the complex relationships between risk-taking and seeing the opportunities.

The three variables of entrepreneurial orientation (EO)—risk-taking propensity, proactiveness, and innovativeness—and entrepreneurial alertness (EA) were found to be positively correlated in a study conducted by Casanova et al. (2023). While EA is favorably connected with all three characteristics, proactiveness is essential in the identification of entrepreneurial possibilities. However, only the proactive dimension of EO demonstrated a meaningful relationship toward the identification of entrepreneurial opportunities. Nevertheless, in this particular situation, risk-taking did not show a substantial immediate impact on the opportunity identification (Casanova et al., 2023). There was evidence to support Hypothesis 3, which postulated a positive correlation between social media use and the discovery of entrepreneurial opportunities. The results showed a positive association, indicating that those who use social media platforms regularly are more likely to locate chances for entrepreneurship. This outcome is consistent with social media's growing function as

networking and informational resource for entrepreneurs. The findings of Nam and Xiong's empirical analysis from 2021 confirm that social media has a major impact on entrepreneurs' ability to identify opportunities for businesses. Big data, Artificial Intelligence (AI), Mobile Internet, and other technologies are rapidly altering how entrepreneurs find, share, and process the information as well as how they evaluate potential business opportunities.

The critical role that people's conviction in their capacity to carry out entrepreneurial duties successfully plays is highlighted by the strong positive link (Hypothesis 7) among ESE and EOI. This emphasizes how crucial it is to build self-efficacy to improve the ability in order to recognize and seize business chances. According to Harjanti and Cahyadi (2019), the findings indicate that the discovery of entrepreneurial prospects is significantly influenced by network, self-efficacy, and creativity. DL has been presented in Hypothesis 8 as a moderating factor between EOI and ESE. According to the supported hypothesis, self-efficacy and the identification of entrepreneurial opportunities are positively correlated when one is digitally literate. DL has considerable direct and indirect impact on entrepreneurs' ability to identify opportunities, according to the study's findings. As demonstrated by Sariwulan et al. (2020), DL is crucial for the growth of business and marketing networks. As previously indicated, this underscores the growing importance of digital competences in connection with entrepreneurship. It also implies that individuals with higher levels of DL are better equipped to use their self-efficacy in order to identify and seize opportunities in the digital realm.

#### Conclusion

In summary, the current study identified entrepreneurial opportunities by offering complex perspectives on the contributions of past experiences, a tendency toward taking risks, social media use, self-efficacy in entrepreneurship, and DL. The correlation between EOI and prior knowledge highlights the strategic significance of education and specialized skills in cultivating an entrepreneurial mentality. The results pertaining to RTP cast doubts on widely held beliefs as to how directly it affects the identification of opportunities, leading towards a reassessment of the intricate connection between risk and entrepreneurial decision-making. The fact that social media usage and EOI are positively correlated, emphasizes how networking and information distribution is changing in the digital era, and encourages business owners to use social media channels. The strong correlation found between ESE and EOI demonstrates the psychological foundations of entrepreneurship. This knowledge may be used by entrepreneurs, educators, and legislators to create interventions that boost the self-confidence of people and encourage a proactive mindset when it comes to seeing and seizing business possibilities. The fact that DL is included as a moderating variable emphasizes how important technological expertise is to become an entrepreneur. Entrepreneurs who possess a strong understanding of digital platforms are more equipped to convert their self-efficacy into practical approaches for identifying and seizing opportunities, as these platforms continue to transform business environments. In conclusion, this study also added to our understanding of theoretical frameworks and real-world applications related to entrepreneurship.

## **Implications**

The current study offered implications for education, policies, and practices. These implications also lay the groundwork for future research which would explore the intricacies of taking risks, the changing nature of social media, and the complex interactions between DL along with ESE that influence the recognition and pursuit of business opportunities. The conclusion offers important ramifications for a range of stakeholders as they provide practical information that may influence tactics, actions, and laws within the entrepreneurial ecosystem. To improve the past knowledge of people, educational institutions and programs may emphasize expertise in pertinent fields and ongoing learning. It is imperative to integrate courses that augment DL to guarantee that prospective entrepreneurs are adequately prepared to maneuver through the dynamic terrain of technology. The

Social Cognitive Theory improves the understanding to identify business opportunities. The findings demonstrate the important role that self-efficacy plays in mediating the complex interactions between PK, RTP and SMU. DL plays a moderating role in these interactions. This demonstrates how well the theory explains and directs the entrepreneurial action. It is important for entrepreneurs to understand the strategic benefits of being active on social media. Making use of these platforms for networking, brand development, and market research helps in improving the recognition and seizing business possibilities. Legislators ought to think about funding programs that advance DL, especially in the field of entrepreneurship. A more dynamic entrepreneurial environment may be produced by policies that promote a culture of measured risk-taking. These policies may also stimulate innovation and entrepreneurial activity. Future studies should use longitudinal designs to examine the changing influence of social media for entrepreneurial behavior and dive deeper into the complex dynamics surrounding risk-taking in entrepreneurship. Initiatives for mentoring may be important in fostering self-efficacy and growth of a more self-assured and proactive entrepreneurial community. Ultimately, the study's findings give interested parties a roadmap for navigating the dynamic landscape of spotting business prospects. By carefully addressing the numerous aspects of prior knowledge, being willing to take risks, using social media, having entrepreneurial self-efficacy, and being digitally literate, stakeholders can improve the resilience, creativity, and adaptability for the entrepreneurial ecosystem.

#### **Limitations and Future Recommendations**

The current study has certain limitations and proposed directions for further research. Firstly, the sample of the study was limited to businesses and entrepreneurs in Baluchistan. Future studies should include a broader spectrum of entrepreneurs from different sectors of various Pakistani regions, as well as information on the number of years they have worked and the reason behind their entrepreneurship. It would be interesting to look at how entrepreneurs use new technologies to find business possibilities, how much experience they have in launching a new company, how willing they are to take risks, and how confident they are about their abilities. Secondly, while the social cognitive theory was used in this study to examine how entrepreneurs recognize possibilities, other relevant theories may also be applicable. It might make sense to employ other theories in future studies to examine the motivations behind entrepreneurs' usage of social media, their utilization of self-efficacy, their risk-taking strategies, and the satisfaction that may be attained from starting a firm.

#### Conflict of Interest

The author of the manuscript has no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

## **Data Availability Statement**

The data associated with this study will be provided by the corresponding author upon request.

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