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A Brief Review of Opportunity Recognition in Entrepreneurship Research

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Abstract

Entrepreneurship is multidimensional in nature. The purpose of this paper was to gather and summarize the plethora of research on opportunity recognition and revealed the constructs specific to entrepreneurial opportunity recognition along with its antecedents and consequences. The study was based on the literature review of entrepreneurial opportunity recognition with emphasis on the leading prominent literature from authentic and well-reputed journals. This study employed the strategy majorly based upon empirical data over the last two decades i.e. 2000-2020. This review indicated that the field is empirically underdeveloped and numerous inconsistencies are existent in research conclusions. The study summarized the phenomenon of opportunity recognition which is referred to as the self-defined field of research. Moreover, the study suggested future research directions to recognize and exploit the business opportunities.

Key Words: *Entrepreneurship, Entrepreneur, Opportunity Recognition, Business Opportunity.*

Introduction

The nature of opportunity is a key concern in entrepreneurial literature for understanding how markets came into being, expand and nurture in the environment. There is a lot of confusion regarding opportunity construct and researchers found three important reasons behind such confusions: (1) Objective nature of the opportunity, (2) perceived status of a particular entrepreneur in shaping the social direction, and (3) what distinct the sub-class of entrepreneurial opportunity from the broader class of opportunity at large (Mcmullen et al., 2007). In the last two decades, research studies have been undertaken to examine how individuals recognized entrepreneurial opportunities progressed rapidly and has become a central theme in the modern entrepreneurship literature. To further advance this concern, this study provides a brief literature review of the research area of entrepreneurial opportunity recognition. In contrast to conventional theory, this review indicates that the field is empirically underdeveloped and numerous inconsistencies are existent in research conclusions. In recent years, a literature review and analysis showed that there are a handful of researches contributed to opportunity

recognition literature and this theme is considered significant by authors and journals (George, Parida, Lahti & Wincent, 2016). So, this study will help future researchers to have a holistic view of literature related to opportunity and its recognition. The review of the literature reveals that only a handful of researchers have directly contributed to the phenomenon and this subject is observed as a supplementary topic by many previous researchers (George et al., 2016).

There are three major schools of thought present among scholars regarding the nature of the opportunity. One school believes that the opportunities are already present and are required to be unveiled or discovered (Kirzner, 1973). On the contrary, the opposing school of thought suggested that the opportunities are constructed and created by the individuals given that opportunities are subjective in nature (Ardichvili, Cardozo & Ray, 2003). The third school of thought believes in the amalgamation of the prior school of thought and suggests that some of the opportunities are discovered while for others there is a need for creation (Alvarez & Barney 2007; Filser et al., 2020). Schumpeter in his studies states that the discovery and creation of the opportunity are the problems of conceptualization related to the entrepreneur. He believed that these concepts are not the opposite of each other but they represent the diversity in the market situations as well as the corresponding entrepreneurs (Schumpeter, 1942). Filser et al. (2020) put forward an observation related to opportunity recognition that has been seen across high-quality journals which emphasize the fact that opportunity is a well-established area of research. In contrast to Schumpeter (1942) who believed that the opportunities are created by the entrepreneurs through providing theories of economic development; Krizner (1997) argues that opportunities are hunted by entrepreneurs with a high level of alertness. In a study conducted by Alvarez and Barney (2007), conclusions were drawn upon the opposing viewpoints of Schumpeter and Krizner. Alvarez and Barney believed that both viewpoints are evenhanded but their validation is purely dependent upon the market contextualization (McMullen, Plummer & Acs, 2007).

In recent years, the opportunity has come forward as the central idea for entrepreneurship but there is little consensus over the definition and the further explanation of the said variable (Hansen & Shrader, 2007). To compete in the current era with an increased innovation under the strain of globalization, the recognition of the opportunity is a pre-condition for the entrepreneurs (Jones & Barnir, 2019). Researchers have so far realized the importance of opportunity especially its recognition due to its implications and the same is the reason for the myriad research on an opportunity in the last two decades. But this can also be a source of chaos and confusion and it also brought the associated risk of "information overload" (Castillo-vergara et al., 2018). In the absence of opportunity, entrepreneurial activity is impractical. The first and foremost step of the entrepreneurial process is the recognition of the opportunity because without pointing out the opportunity, no entrepreneurial process could ever take place (Harms et al., 2009). There had an occurrence of the paradigm shift among the researchers because of their focus adaption on opportunity rather than identification of the people bearing entrepreneurial orientation. This shift helps in the explanation of opportunity within the entrepreneurial process (Eckhardt & Shane, 2003). This reality is now being recognized in the past few years and has gained some attention from different researchers but previously this has been in the hind-sight of the scholars giving more weightage to the entrepreneurial behavior and other aspects (Short et al., 2010).

Past literature reveals that there is a handful of researches that contributed to opportunity recognition and it is considered substantial by authors and academic journals (George et al., 2016). There is room for further research to contribute in the said area particularly a need for in-depth investigation regarding opportunity recognition. The entrepreneurial opportunity has been the topic of various studies but there is a dearth of researches related to opportunity emergence, its recognition, and exploitation (Shepherd et al., 2018). In the previous few years, there has been a surge in the entrepreneurship studies published in

the notable management and entrepreneurship journals which not only unveils the importance but also emphasized entrepreneurship as a phenomenon. Meanwhile little has been done to explain the process of entrepreneurial opportunity recognition and exploitation. The entrepreneurship phenomenon is not much different, like other societal mechanisms because of the changing issues new contexts are created and introduced. So there is a continuous need for an explanation of our surroundings to keep these societal mechanisms relevant. Additionally, it is up to the researchers' manifestation regarding contextualization of the phenomenon they are tilted towards.

This study is manifested to address the said concern and to make the work graspable for the researchers instead of bombarding them with myriad publications. The aim is to gather and summarize the plethora of research on opportunity recognition by conducting a brief literature review. In a nutshell, the existing study is an attempt to give a brief historical overview of entrepreneurial opportunity recognition and provides investigation in order to:

a) Highlight the importance of opportunity recognition in the entrepreneurial process
b) Synthesize previous scholars' contributions to opportunity recognition and to accumulate key contributions in the entrepreneurship field.
c) Identify key antecedents and consequences in the entrepreneurial opportunity domain
d) Illustrates the dynamics of the process of opportunity recognition
e) Highlights existing research gaps, give insights into current trends and directions for future research.

Theoretical Background

Opportunity recognition is one of the most important areas of research in entrepreneurship. Entrepreneurship behavior is activated when an entrepreneur recognizes an opportunity and past studies have highlighted the significance of this phenomenon (Shane & Venkataraman, 2000; Shane & Nicolaou, 2015). Since then, researchers have intrigued this concept and investigated where the opportunities came from and how they are discovered and utilized (Alvarez & Barney, 2019; Shepherd et al., 2019). Literature regarding individual's perceptions influencing their decision-making about new ventures and initiatives is underdeveloped (Shane & Nicolaou, 2015, Hill & Birkinshaw, 2010). Entrepreneurship is the identification of opportunities not exploited so far (Hitt et al., 2001). According to Kirzner (1973), the opportunity is the ability to combine resources and create value to meet market needs. The interest of researchers has been increasing from the past few years in the phenomenon of recognizing and exploiting opportunities (Alvarez & Barney, 2019; Foss & Klein, 2020). The present literature review includes the identification and recognition of entrepreneurial opportunities from a resource-based view of entrepreneurship. Opportunity recognition is one of the key elements of the entrepreneurial process (Schwartz et al., 2005). Drucker (1985) explained that the opportunity can create in different ways for instance, due to technological changes, demographic or industrial changes, any unexpected event, or any problem in a marketplace. Furthermore, future research is required to increase the authenticity of entrepreneurship construct in literature (McCline, Bhat & Baj, 2000). Over a period of time, there are many confusions came up regarding the nature of opportunities and the recognition process. For instance, it is criticized that past researches paid attention to the process of discovery and exploitation of opportunities without focusing on the nature and source of opportunity itself. There are two separate views of opportunity: subjectively perceived & objectively discovered. Researchers thought that both of these perspectives can be observed in every entrepreneurial opportunity (Renko et al., 2012). Some authors argued that the subjective or socially constructed nature of opportunity makes it difficult to separate it from an individual while others argued that opportunity is objective in nature evident to the well-informed entrepreneur (Mcmullen et

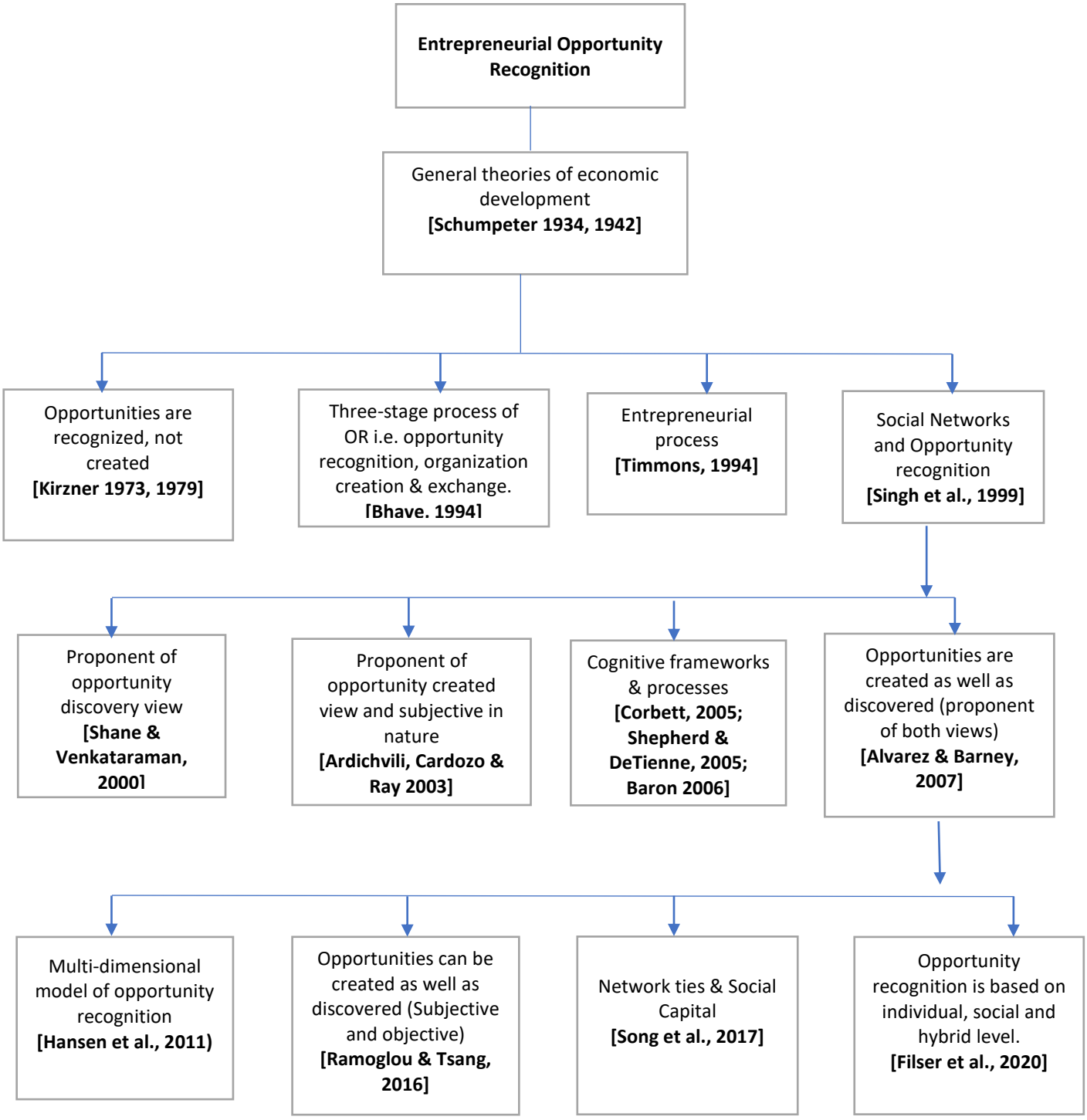
al., 2007). Researchers believed that both of these perspectives were found in entrepreneurial opportunities and they highlighted where and how these features might co-exist (Renko et al., 2012). Researchers have an opinion that entrepreneurial opportunity recognition is a subjective process and the opportunity itself is an objective phenomenon (Shane & Venkataraman, 2000; Renko, Shrader & Simon, 2012).

Entrepreneurship explores the recognition of new or existing opportunities, cognitive processes, human behaviors, and actions to make use of entrepreneurial opportunities. In the entrepreneurial process, recognition of business opportunities is considered as the initial part (Rodríguez, Garrido, Gómez & Navarro, 2010). According to Barringer (2008), opportunity recognition is the process by which one can elucidate the possibility of creating an innovative and profitable business, product, or service. According to Rodríguez et al. (2010), opportunity recognition is a constructive process that understands the economic environment throughout entrepreneurial decision-making. It is a topic of great interest for decades in the field of entrepreneurship that how individuals identify and exploit opportunities. It is a cognitive process comprised of critical thinking, generating creative ideas, and problem-solving for new ventures and startups (Bird, 1988; Ardichvili et al., 2003; Wasdani & Mathew, 2014; Shane & Nicolaou, 2015). According to Ardichvili et al. (2003), opportunity recognition refers to the phenomenon in which entrepreneurs look for "something out there" to gain a benefit or get some potential value. In literature, the opportunity recognition process involves perception, discovery, and creation. This process consists of three different stages i.e. 1) perceive market needs, 2) identify the solution of a problem or discover the fit between need and a resource, and 3) launch a new fit for the need in a marketplace (Ardichvili et al., 2003, Kirzner, 1973, 1979). Dimov (2007) clarified three levels of entrepreneurial opportunity recognition i.e. intuiting, interpreting, and integrating. The first level is concerned with the cognition of an individual regarding the subject involved in the process. Different ideas are intuited by individuals and the knowledge comes from their surroundings (Venkataraman, 1997). This further establishes different outlooks regarding the available resources for disposal (Krizner, 1997). At the individual level, these outlooks or perspectives are interpreted as perceived potential while in a group level, interpretation is polished through the exchange of opinions, knowledge, emotions, and other involved subjects (Amabile, 1996; McMullen & Dimov, 2013).

Subsequently, individual perceptions or opinions are integrated into a collective decision process that results in the ultimate opportunity recognition. This integrated perspective which is established collectively will lead to direct entrepreneurial action (Dimov, 2007; Wood & McKinley, 2010). An entrepreneur who is willing to take risks, proactive in his actions, and having an innovative mindset generates new business ideas that lead to developing a vision to capitalize on a business opportunity (Bird, 1989).

Risk-taking is considered as entrepreneurial behavior (Das & Teng, 1997) and is also a dimension of entrepreneurial orientation (Lumpkin & Dess, 2001). It can be an individual level (Sitkin & Pablo, 1992) or a firm-level trait (Baird & Thomas, 1985). Researchers argue that entrepreneurs' personality traits and cognitive biases influence their decision-making such that some entrepreneurs perceive business ventures as riskier than non-entrepreneurs (Simon et al., 2000). Few of them are optimistic in their decisions and vice versa. Risk-taking is a crucial factor to start a new venture (Timmons & Spinelli, 2007) and entrepreneurs can take risks in return for successful opportunity exploitation and potential rewards (Segal et al., 2005).

Figure 1: Theoretical Evolution of Opportunity Recognition in Entrepreneurship Literature



Antecedents & Determinants of Entrepreneurial Opportunity Recognition

According to Filser et al. (2020), antecedents of opportunity recognition is based on individual, social and hybrid level. Individual antecedents refer to the mental and cognitive frameworks including prior knowledge (Shane, 2000); active formation search (Kaish & Gilad, 1991), experiential learning (Corbett, 2005), and entrepreneurial alertness (Baron, 2006). Social antecedents include social networks (Ozgen & Baron 2007), particularly social and networking capabilities derived from these networks (Davidsson & Honig, 2003). Some researchers highlight hybrid antecedent's i.e. individual as well as social antecedents including personality traits, prior knowledge, and social networks (Ardichvili, Cardozo & Ray, 2003). Filser et al. (2020) argued that those entrepreneurs who have social networks are more capable to successfully identify business opportunities as compared to the rest of the entrepreneurs.

Dynamic environment

A strategic entrepreneurial approach makes it possible for businesses to look for new emerging opportunities in the market. The success of entrepreneurs depends on how they can identify the market gaps, needs, and future trends to bridge the gaps and maximize their wealth. In a dynamic environment, only those businesses can grow and survive who are proactive and ready for rapid change. Volatile circumstances help businesses to recognize more opportunities and out-perform only when they are prepared to exploit opportunities (Lumpkin & Dess, 1997). Dynamic environments create new business opportunities for entrepreneurs. To gain a competitive advantage, proactive strategies could be utilized to exploit these opportunities (Zahra, 1991). Researchers suggested that there is room for future research to examine the influence of environmental dynamism on the recognition of entrepreneurial opportunities in different domains (Chaun, Chiang, Hung & Lin, 2020). In contrast, few researchers believed that businesses are more likely to get benefits from new product innovation relatively in a stable environment (Prajogo, 2016). Christensen (1996) believed that close networking with business partners enables monitoring of current environmental dynamics, emerging trends, changing demands, and patterns that may present entrepreneurial opportunities.

Entrepreneurial alertness

Entrepreneurial alertness can play a significant role in opportunity identification (George et al., 2016). Alert individuals respond well-timed to the market changes and better able to recognize business opportunities. It is considered a key element in finding market opportunities. Entrepreneurial alertness enables individuals to respond to information that facilitates them to materialize new opportunities (Gaglio & Katz, 2001). In past researches, scholars conducted their studies on this construct and put forward their views to understand the concept and its relationship with opportunity identification and recognition. There are very few empirical studies that proved the critical role of social and cultural intelligence in cross-cultural communications, cultural adjustment & task performance (Ang et al., 2007), negotiation outcomes (Imai & Gelfand, 2010), and export performance (Magnusson et al., 2013). Researchers confirmed that alertness helps people to coordinate and perceive information related to the creation of new opportunities in different knowledge domains (Gaglio & Katz, 2001).

Cognitive abilities of entrepreneur

Opportunity recognition and exploitation are behavior-related activity-based concepts. Few activities define opportunity recognition such as alertness, gathering information, interacting, problem-solving, and evaluating the opportunities. These activities included but not limited to the cognition involves in the

entrepreneurial process (Gregoire et al., 2010). Cognitive biases and heuristics influence the decision-making of the entrepreneur in multiple aspects (Alvarez & Busenitz, 2001). At times, these biases become challenging and influence the judgment that leads to the success or failure of new business. Recent studies investigated the relationship between feelings and entrepreneurship (Baron et al., 2012). Researchers argue that entrepreneurs' personality traits and cognitive characteristics influence their decision making for instance some entrepreneurs perceive business ventures as riskier than non-entrepreneurs (Simon et al., 2000). Within the field of psychological studies, entrepreneurial self-recognition is considered a significant area of research. Entrepreneurial cognition research is in full swing and past researchers argued that this phenomenon is indistinguishable from individual cognitive biases.

Entrepreneurial orientation

It refers to the practices and actions that encompass entrepreneurial behaviors and undertakings. Individual entrepreneurial orientation is a mindset that focuses on individual innovative thinking and triggers creative solutions, new products and services, and shaping the business environment (Lumpkin & Dess, 2001). The literature strongly suggests that entrepreneurial orientation (EO) remains a thriving area of research and has been gaining huge attention from scholars in the entrepreneurship field (Wales, 2016). EO has been considered as an important research topic and several research articles published in the Entrepreneurship Theory and Practice and other top scholarly journals (Bolton & Lane, 2012). Entrepreneurial orientation leads to the opportunity identification that results in profitability and performance (Baker & Sinkula, 2009).

Entrepreneurial behavior

To address economic problems, local problem-solvers could develop entrepreneurial behavior to cherish entrepreneurial success and recognize opportunities (Singh, Bhowmick, Eesley & Sindhay, 2019). Yang, Dess, and Robbins (2019) argued that EO can identify emerging opportunities and improves performance as it discovers the opportunities regardless of successfully capitalize these opportunities. Organizations having advanced entrepreneurial orientation are better able to recognize opportunities and make sooner decisions and adaptations in a dynamic environment as compare to their competitors (Gupta & Batra, 2016; Yang et al., 2019). EO helps entrepreneurs to grab new opportunities from entrepreneurial activities that generate benefits in the long run (Singh, Bhowmick, Eesley & Sindhay, 2019). The lack of empirical work limits our understanding of why some entrepreneurs are better able to recognize opportunities in interacting within culturally diverse contexts resulting in a stronger effect of EO on opportunity recognition. As per the literature search, very few researchers examined its role in entrepreneurship researches.

Entrepreneur's social skills

Entrepreneurs' social skill is an essential element of social intelligence which plays a significant role in the success of entrepreneur (Baron & Tang, 2009). Situational perception, situational reaction, cognitive empathy, and social skills are the components of social intelligence that can combine to clarify the greater difference in entrepreneurs' success (Rahim, 2014; Rahim et al., 2014). Scholars are very interested in exploring the construct of social intelligence that is demonstrated by the theoretical and empirical studies that are coming out of specialized journals. A quest for literature on "social intelligence" in PsycINFO resulted in 3583 hits, but a search on "entrepreneurship and social intelligence" inevitably results in no hits (Rahim, Quah, Rahman, Jasimuddin, Shaw & Ozyilmaz, 2019). Social networks are used to access information, seek advice and tap new business opportunities in the entrepreneurship process. Prior

researchers have asserted that the liaison between network actors is often cited as a critical component of the entrepreneurship process which further enhances the exploitation of entrepreneurial opportunities (Hoang & Antoncic, 2003; Wales, 2016).

Prior knowledge of entrepreneur

In an entrepreneurship setting, a focal actor is an entrepreneur having skillset, prior experience (human capital) and knowledge, social network and connections (social capital), and assets (financial capital) to invest in a business (financial capital) (Davidsson & Honig, 2003). Literature found that prior knowledge, familiarity, and external knowledge that is coming from social capital played a role in opportunity recognition (Rodríguez et al., 2010). Past studies believed that prior knowledge of an entrepreneur played a vital role in the recognition of an opportunity. It refers to the information gained through work experience, education, or other sources (Shepherd & DeTienne, 2005). Numerous researchers underlined the significance of prior knowledge in recognizing entrepreneurial opportunities (Shane, 2000; Ardichvili et al., 2003; Alsos and Kaikkonen, 2004; Shepherd & DeTienne, 2005; Baron, 2006; Marvel & Lumpkin, 2007). In contrast to previous researches, Bhagavatula et al. (2010) proposed that the prior experience of an entrepreneur is not crucial in identifying and recognizing business opportunities rather it has detrimental effects on the perceived opportunity. Similarly, researchers indicated that without any prior knowledge or industry experience, pioneer entrepreneurs can launch the venture and create new industry (Alvarez, Young & Woolley, 2015).

Entrepreneurial resources

Entrepreneurial resources have a significant impact as they need a mechanism to share, transform, and integrate entrepreneurial resources to recognize and exploit opportunities (Baert et al., 2016). Entrepreneurial resources include human capital, social capital, financial capital, physical capital and organizational capital (Chen et al., 2019). According to the resource-based theory, resources increase the entrepreneurial capabilities to identify and recognize new opportunities (Davidson & Honing, 2003). In the entrepreneurial process, there is a dynamic interplay of opportunities and resources. Resources include all the tangible and intangible assets managed by entrepreneurs or accessible via social networks that allow them to exploit various opportunities (Clough et al., 2019). Successful entrepreneurs always being part of a good network and get information from the resources which is beneficial for decision making. In other words, these entrepreneurs scan material information from their social connections to identify market opportunities and hunt resources that are not in their control (Bhagavatula, Elfring, Tilburg & Bunt, 2010). Entrepreneur's sense of diverse information and resources available to them using social networks is likely to influence business opportunity exploitation. Support from business partners or having close connections with them can nurture social relationships and assist opportunity identification that further help entrepreneurs in financing (Hite & Hesterly, 2001; Yang et al., 2019).

Covin and Miller (2014) proposed network theory which argues that the bonded ties within network actors help them to take risky actions and access entrepreneurial opportunities and resources. It has been noticed that in Asian cultures, building long-term relationships based on trust and social networks between groups of people sharing a deep sense of solidarity and belonging. It is observed that building deep relationships with fewer people was seen as the preferred way to do things. Thus bonding social capital based on strong ties was extremely important in identifying and exploiting entrepreneurial opportunities (Grzegorczyk, 2019).

Networking capabilities and entrepreneur

Social setting in which an individual's operate influences significantly their opportunity recognition, evaluation, and capitalization (Mcallister & Ferris, 2018). Bonding social capital based on strong ties was extremely important in identifying and exploiting entrepreneurial opportunities (Grzegorczyk, 2019). Entrepreneurs having a strong network and high social intelligence could help them in identifying prospects and capitalizing on market opportunities. Thus, entrepreneurs with strong networking will perceive less policy uncertainty and will capitalize on the social network to exploit business opportunities (Dieleman & Boddewyn, 2012). When entrepreneurs seeking new business opportunities, social ties are very important in overcoming problems related to market failure and there may be interactive effects between social ties and institutional context. These ties can provide information to investors that allow entrepreneurs to obtain resources and pursue further opportunities. The significance of social ties may vary across economies or different sociocultural settings (Shane & Cable, 2002). Social networks act as a pipe through which information flows and these networks allow entrepreneurs to find resources (Podolny, 2001). Scholars have also identified various resources apart from human, social, and financial capital such as legitimacy, narratives, and intellectual property (Clough et al., 2019). The networking capabilities of entrepreneurs provide them financial support, market information, emotional support, and future guidelines.

Table 1: Antecedents at individual, group and organizational level

Level	Antecedents
Individual level	▪ Mental and cognitive frameworks and prior knowledge (Shane, 2000) ▪ Active formation search (Kaish & Gilad, 1991) ▪ Experiential learning (Corbett, 2005) ▪ Entrepreneurial alertness (Baron, 2006).
Social level	▪ Social networks (Ozgen & Baron, 2007) ▪ Social and networking capabilities (Davidsson & Honig, 2003)
Hybrid level	▪ Personality traits, prior knowledge and social networks (Ardichvili, Cardozo & Ray, 2003).

Consequences of Entrepreneurial Opportunity Recognition

Entrepreneurial opportunity exploitation

The exploitation of an opportunity refers to those activities committed to gain returns from the new product arising from the opportunity (March, 1991). It refers to individuals' ability to translate favorable sets of circumstances into the realization of goals through the effective execution of carefully selected behaviors (Wihler, Blickle, Ellen, Hochwarter & Ferris, 2014). Opportunity exploitation is characterized by designing a product or service based on a perceived entrepreneurial opportunity, getting suitable resources, collecting financial resources, and establishing the enterprise is known as opportunity exploitation (Kuckertz et al., 2016). Entrepreneurs take advantage of business opportunities to deliver and create value for potential investors. Without opportunity exploitation, the recognized opportunity will not launch a successful business and yield profits (Ardichvili et al., 2003).

Entrepreneurial Performance

Entrepreneurial performance is influenced by the ability to recognize an entrepreneurial opportunity, either before or after the business is launched. Those entrepreneurs who have better able to recognize

opportunities in the market are more likely to tap successful opportunities for their ventures and improve their performance (Baron 2006; Renko, Shrader, & Simon, 2012; Rasmus, Wennberg & Kim, 2014, Chen, Chan, Hung & Lin, 2019). Learning plays a very significant role and influences entrepreneurial performance in the twenty-first-century marketplace. Individuals who got a high score on personality learning traits based upon behaviors linked with entrepreneurial role tends to be more successful in their ventures (Zhao et al., 2010). Those entrepreneurs who can possess learning initiatives can better able to enhance venture performance (Hmieleski & Baron, 2009). Past researches have established a link between opportunity recognition and performance (Baron, 2006; Rose, Kumar & Yen, 2006; Planko et al., 2017; Garrone, Grilli, & Mrkajic, 2018; Chen et al., 2019).

Entrepreneurial Success

According to Wach, Stephen and Gorgievski (2016), entrepreneurial success comprises firm performance, personal fulfillment, workplace connections or meaningful relationships with others, community impact, and monetary rewards. Despite the widespread realization of understanding subjective measures of entrepreneurial success is critical for the advancement of entrepreneurship research, this concept remains unexplored and ill-defined by scholars (Dyke & Murphy, 2006; Fisher et al., 2014; Gorgievski et al., 2011). Entrepreneurs typically measure success in monetary terms; however, focusing solely on financial incentives and related economic indicators of firm performance don't capture all aspects of success (Wach et al., 2016). According to Scott (2003), the entrepreneurial process is incomplete if potential entrepreneurs are unable to decide to take advantage of opportunities that have already been identified and recognized. The recognized opportunity will not launch a successful business or yield profits unless it is exploited. Proper exploitation of identified opportunities leads to entrepreneurial success (Wach et al., 2016).

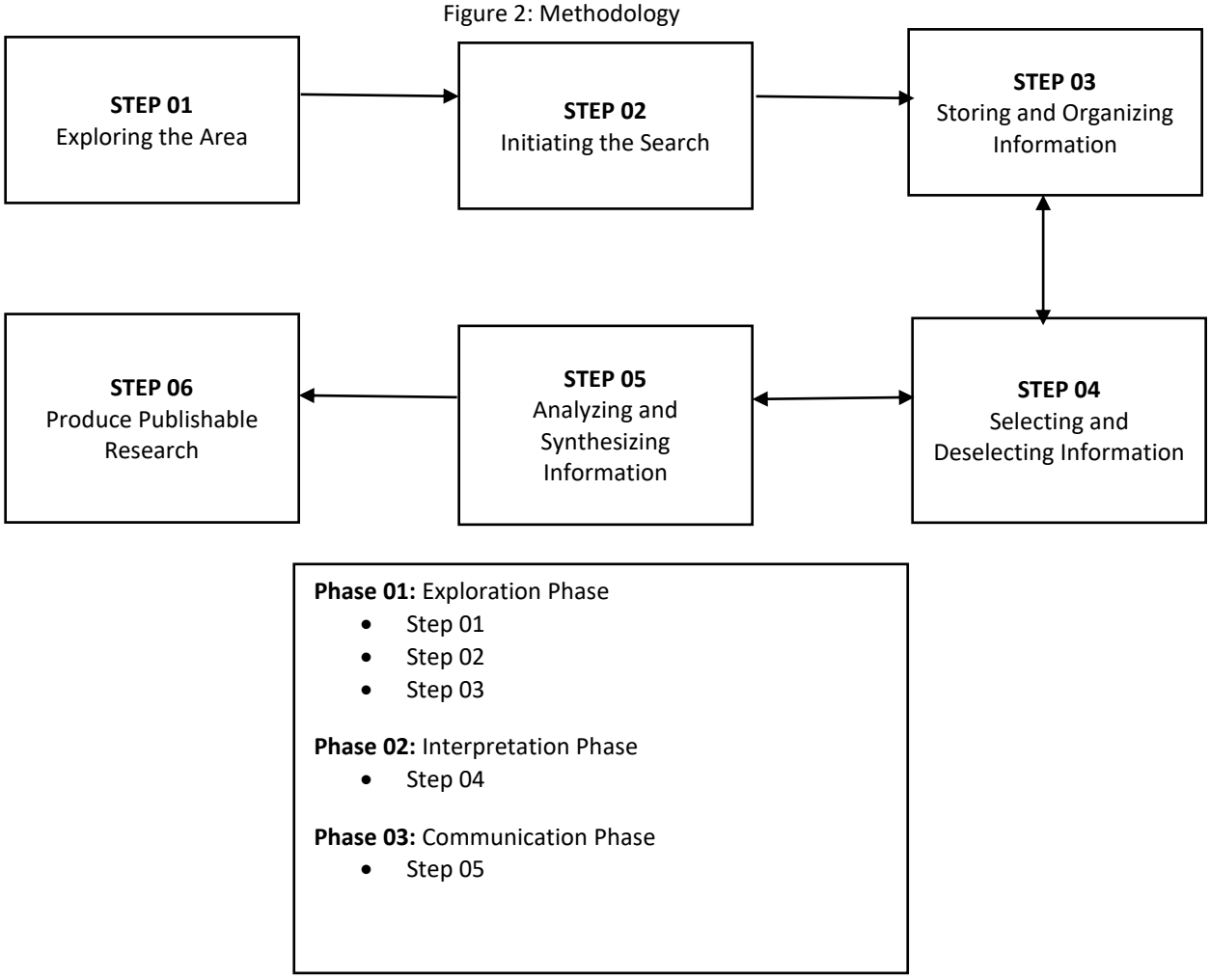
Methodology

Entrepreneurship is a global phenomenon that is constantly evolving, and it has been extensively researched over the last two decades. There is a need to investigate this area based on its importance, particularly the opportunity recognition construct in the entrepreneurial domain.

To address this paradigm shift, the study is conducted on the evidence-based studies providing previous literature related to entrepreneurial opportunity recognition to provide future researchers a pathway for further exploration. The aim is to put forward a review that could represent the praiseworthy efforts and contributions of past scholars in this domain from 2001 to 2020.

The study is comprised of three phases and the six-step approach which carries a flow of research work from exploration or selection of research area to the production of the publishable meta-analysis. Fig 1 given above explains the flow of this research work. Where phase one is the exploration phase that has four steps i.e. exploring the area of research; initiating the search for the specific constructs and variables; storing and the organization of the retrieved information; selection and discarding of the data. The exploration phase was based upon the examination of the area and the research topic by initiating the Google scholar search which resulted in the 250 articles. These articles were downloaded and further filtered for relevance and scope of this review. After filtration 120 articles were selected upon which the current review is based. Phase two executes the logical interpretation and synthesis of previous evidence-based data such that previous patterns are captivated and new horizons are uncovered. Phase three is the communication phase where the complete study is composed in a structured form for a double-blind peer review to be published and to subsidize the other researcher and practitioners.

Figure 2: Methodology



This review is accompanied by referring from related journals and other academic information bases which includes Web of Science, PsycINFO for articles, book parts, and dissertations. We emphasized the leading management and prominent entrepreneurship journals included but not limited to Academy of Management Journal (AMJ), Academy of Management Review (AMR), Journal of Management (JOM), Journal of Business Venturing (JBV), Academy of Management Annals (AMA), Academy of Management Perspectives (AMP), Journal of International Entrepreneurship (JIE), Journal of Business Research (JBR), Entrepreneurship Theory & Practice (ETP), Strategic Management Journal (SMJ), and The Journal of Entrepreneurship (TJE). To provide a thorough literature review the research articles were searched on Google Scholar as a result of the resource terms i.e. entrepreneurship, entrepreneur, opportunity recognition, entrepreneurial opportunity, new venture, and new business. While conducting the study, articles were selected and deselected from the above-mentioned journals to standardize this overview and to enhance the validity of the study. Hundred percent of the selected articles were published in the English language.

Measurement of Entrepreneurial Opportunity Recognition

There is a lack of a valid and reliable multi-item scale for the measurement of opportunity recognition. Previous work showed that these issues are not limited to the research but these concepts should be openly explained and measured to progress in the domain. Kuckertz, Kollmann, Krell, and Stockmann (2017) suggested two scales for measuring these constructs i.e. opportunity recognition and opportunity exploitation and demonstrated reliability as well as construct, discriminant, and nomological validity. These measures developed practice tools that could be useful in exploring the antecedents and consequences of both constructs. The scale was developed by kuckertz et al., 2017 and the items assessing entrepreneurial opportunity recognition includes the following:

1 I am always alert to business opportunities
2 I research potential markets to identify business opportunities
3 I search systematically for business opportunities
4 I look for information about new ideas on products or services
5 I regularly scan the environment for business opportunities

The entrepreneurial opportunity recognition subscale is considered a very helpful tool for classifying entrepreneurs from non-entrepreneurs. This scale was developed to analyze an important dimension of the entrepreneurship process known as opportunity recognition (McCline, Bhat & Baj, 2000). However, Baron (2006) addressed the psychological underpinning, and the need for scales or measurement tools and instruments remains. The conceptualization of pattern recognition and its connection with opportunity recognition might provide more important approaches to better measuring the opportunity construct. The Entrepreneurial Opportunity Recognition subscale seems to be a valuable instrument for distinguishing between entrepreneurs and non-entrepreneurs (McCline, Bhat & Baj, 2000).

Discussion

One of the most interesting elements of working in the entrepreneurship domain is its multidisciplinary nature and the variety of research opportunities it provides to further theoretical development, methodological debates, empirical research, and practical implications (Shane & Nicolaou, 2013). Entrepreneurship has become a buzzword that has entered the mainstream in recent years. Within entrepreneurial research, the opportunity has come forward as the construct of greater interest in the last two decades. Researchers are intrigued about the existence of opportunity, its creation as well as its recognition by an entrepreneur at different levels. The literature in this regard is not much developed and various inconsistencies have been seen. However in recent research, opportunity recognition has been considered as an integral part of the entrepreneurial process. Although there has been a dispute among the researchers regarding the nature of opportunity; different schools of thought are co-existing where some belief in the discovery, other believers in the creation, and another school believe in the amalgamation of the discovery and creations. But this doesn't degrade the importance of opportunity. Among the research community, it is widely accepted that the opportunity itself is objective in nature but its recognition is full of subjectivity as it directly involves the cognitive and social abilities of an entrepreneur. The study addresses the subjective premise of the entrepreneurial process and gathers the antecedents and the determinants as well as the consequences of the recognition of the opportunity where the external environment provides the basis eco-system for all of the said processes to take place. Previous research investigated different behaviors of entrepreneurs including entrepreneurial alertness, intentions, personality traits, entrepreneurial orientation, prior knowledge, experience and cognitive abilities. Most of the piece of work focused on how an entrepreneur identifies, develops, and recognizes

opportunities (Priyanto & Sandjojo, 2005; Calvo et al., 2017). Opportunity is a wide topic that overlaps many research areas other than entrepreneurship. This study focuses on an opportunity with its applications in applied entrepreneurship. However, the opportunity is not limited and has implications in various research setups. Moreover, this study has tried to encompass the prominent research done in the twenty-first century but limited resources have definitely impacted the outreach of researchers; as there is always a room for improvement and human error is inevitable in the process.

Implications for Future Research

The study identified numerous factors that influence the opportunity process, highlights shortcomings, and propose avenues for future research. The study provides both theoretical and practical implications for researchers, entrepreneurs, and practitioners across the business incubation industry. This overview is a collection of already existed and explored constructs concerning opportunity recognition in the entrepreneurship field. It will help researchers to get clarity of the previous research by highlighting the research gaps and potentially profitable outcomes as a result of filling these gaps. This study has encompassed the literature of the last two decades and it has also precisely pointed out the inconsistencies and the gaps within the existing literature. This study provides insights to enhance further understanding of the opportunity recognition process. Following are the future research directions concerning the discussed constructs and variables in the study:

Opportunity: Although research has significantly increased our understanding of the initial leap of the entrepreneurial journey, there are numerous opportunities for future research to contribute to the entrepreneurship literature, including (1) deeper level investigation of opportunity construct, (2) a more micro-perspective of self-employment entry, and (3) a broader range of initiation contexts (Shepherd, Wennberg, Suddaby & Wiklund, 2019). If we have a better understanding of how opportunity emergence works, we can educate entrepreneurs on how to engage in the entrepreneurial process more successfully, move through it more quickly, and engage others in facilitating the process.

Behavior & Personality: Previous researchers worked more on entrepreneurial skills and abilities rather than on competencies. It may be possible to develop an intrapreneurial competency profile by focusing on the relationships between individual entrepreneurial behavior and the resulting outcome (Lang & Baltes, 2019). Future research may attempt to incorporate the individual level, such as behavior, personal traits, human capital, and attitudes.

Environmental Dynamism: Chen, Chan, Hung and Lin (2020) suggested that future research could concentrate on the impact of the industrial environment on the recognition of entrepreneurial opportunities in various disciplines.

Individual differences: Individual differences play an important role in the recognition, evaluation, and capitalization of opportunities. Future research should look into how other theoretically relevant individual differences interact with and inform our conceptualization (McAllister, Ellen & Ferris, 2018). . Prior studies have focused on the individual entrepreneur and neglected the social context in entrepreneurial processes, as it is preoccupied with whether possibilities are generated or discovered by individuals (Mishra & Zachary, 2014).

Entrepreneurial Alertness: Entrepreneurial alertness has been given a lot of importance in the academic entrepreneurship area. As a result, there is a need to deliberate further to establish entrepreneurially alert institutions for academia (Sharma, 2019). According to him, there is room for further investigation in

the field of entrepreneurial alertness. Previous research in this field has suggested future research for further development in the literature.

Entrepreneurs' Social Skills: To improve further understanding of the relationships between social intelligence and the effectiveness of entrepreneurial behaviors, more research is needed. Future research should focus on carefully designing and evaluating the effects of social intelligence training in improving firm performance (Rahim et al., 2019). Furthermore, future research could incorporate in-depth qualitative case studies as well as quantitative data analysis to provide a complete picture of the social intelligence phenomenon in the entrepreneurship literature.

Social Networking: Previous studies are mostly cross-sectional. In the future, longitudinal research in this domain is preferable to find out more interesting findings over the period. Future research could look at how various levels of human capital in developed and developing countries are compatible with social networking, opportunity recognition, and internationalization (Urban, 2019). Because much of the literature focuses on geographically clustered networks, entrepreneurship researchers could benefit from using social network models to investigate various regional entrepreneurship outcomes. How do "weak" and "strong" network ties important for entrepreneurship differ across regional units, how are they affected by infrastructure and institutional conditions in those regions, and how do such network ties affect entrepreneurial processes and outcomes that differ across regions? (Shephard et al., 2019).

Entrepreneurial Orientation: Other variables that could moderate or mediate the relationships between the environment and the dimensions of EO could be investigated in future studies. It's worth noting that the dimensions of innovativeness and pro-activeness were found to have remarkable results in previous research because they were statistically indistinguishable and thus were treated as a single proactive-innovation dimension. Notably, the statistical analysis's conclusion contradicts the widely accepted EO theory. This finding could be regarded as inconclusive so these two dimensions can be further investigated (Eresia-Eke, 2019).

Prior Knowledge: Because the proportion of prior knowledge and experience varies from person to person in various industries, it is suggested that comparative studies should be conducted in different industrial domains to evaluate and compare the possible differences in the role and impact of prior knowledge on the opportunity recognition process (Hajizadeh & Zali, 2016)

Entrepreneurial Resources: In future studies, the researcher must explore how resources, or a lack thereof, affect psychological well-being and cause psychological stress. Similarly, research on entrepreneurial bricolage indicates that sometimes entrepreneurs are forced to develop products or services with whatever resources are available to them, which often results in lower-quality entrepreneurial ideas and outcomes (Baker & Nelson, 2005). Despite this, many well-funded new ventures fail to achieve long-term success. This implies that a more detailed understanding of the venture's resource access toward entrepreneurial milestones and emergence events overtime is required (Marshall, 2020).

Entrepreneurial Opportunity Recognition: Future research attempting to better understand the opportunity may use the findings of recent research as a stepping stone to investigate the antecedents and consequences of opportunity recognition and opportunity exploitation constructs in greater depth (Kuckertz et al., 2017). This study has implications for entrepreneurs and sheds light to build a solid basis for entrepreneurial success. A study of which combinations of individual and social drivers are most effective in recognizing opportunities in practice would be useful for aspiring entrepreneurs. Further

research could be done to review articles in the domain of opportunity recognition using fuzzy-set qualitative comparative analysis (fsQCA), which is becoming more popular in entrepreneurship research (Kraus, Ribeiro-Soriano & Schussler, 2018). There is a lot of untapped potentials to connect strategic foresight with opportunity recognition (Iden, Methlie & Christensen, 2017) and researchers suggest that future opportunities might be sensed through foresight (Semke &Tiberius, 2020). The needs of customers may provide a great source of information on how to tap opportunity and related initiatives regarding entrepreneurial ventures. Tiberius (2019) proposed that the scenario technique is very helpful in enabling entrepreneurs to discover multiple future developments.

Any variable can be visualized in three domains i.e. individual, organizational, and societal domains to create a larger picture and to reveal the working dynamics. Opportunity is directly linked to these entire domains and has a deep impact on every stated domain. For individuals, opportunity recognition is cardinal for the entrepreneurial process. The same will be the case for organizations e.g. accelerators, business incubation centers and excubators. The entrepreneurial activity will result in the enhanced economic activity that is beneficial for individuals, organizations, and society at large.

Conclusion

The literature on opportunity recognition has evolved rapidly over the last few years. The purpose of this brief review is to upsurge a deeper understanding of entrepreneurial opportunity recognition that has been undertaken in numerous entrepreneurship studies. This review explains meaningful relationships and influencing factors of opportunity recognition to elaborate on this phenomenon and highlights the latest trends and future directions in this domain. Various research gaps are also identified that can serve as a call for more theoretical and empirical research in the entrepreneurship field. There is a need for more theoretical and empirical research in the entrepreneurship literature. In previous research, the entrepreneurial process has been received greater attention however there is still a need to discover the phenomenon in greater depth to evade myopic perspective. There is an extensive debate in the literature about the nature of the opportunity and whether an opportunity is generated or discovered by individuals. The basic aim of the study is to provide an overview of the growing literature on opportunity recognition with a focus on its antecedents and consequences. For entrepreneurship researchers, the opportunity has long been an intriguing and significant topic, but it has remained an elusive part of the entrepreneurial experience (Mishra & Zachary, 2014). This review identifies the individual, social and hybrid antecedents of opportunity recognition to enhance entrepreneurial performance. Our study is an attempt to provide an overview of research on entrepreneurial opportunity recognition by conducting a brief literature review. This review provides a deeper understanding of the opportunity phenomenon and its recognition process to identify and recognize business opportunities.

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