

ENTREPRENEURIAL ORIENTATION AND ORGANISATIONAL PERFORMANCE; MEDIATION BY ORGANISATIONAL RESILIENCE

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ABSTRACT

Strategic management and entrepreneurship literature suggests a significantly positive relationship between that entrepreneurial orientation (EO) and organizational performance (OP). However, the relationship especially in uncertain, ambiguous and dynamic environment is not that straight forward. The relationship is effected by number of intervening and contextual mechanisms. Organisational resilience (OR) being one such mechanism is missing in empirical research exploring the EO and OP relationship. It has been reported that sound planning and suitable adaptive capacities of an organization (organizational resilience) positively affect the organizational performance. Primary purpose of this paper is to investigate the relationship between EO and OP in the developing economy's context. Additionally it is intended to explore the role of OR as intervening mechanisms impacting the relationship. A casual cross sectional study in developing economies context deploying novel combination of social media networks (SMNs) and direct approaches. Data was collected from a sample 151 managers conversant with the strategic orientation and planning processes of their enterprises, through questionnaire survey. Aligned with previous research findings, the results revealed significant positive relationship between EO and OP. Moreover, it was found that OR partially mediated the association between EO and OP. Hence, hypotheses stands supported. Implications, limitations and direction for future research are discusses.

Keywords: entrepreneurship, entrepreneurial orientation, organizational performance, psychological capital, organizational resilience

INTRODUCTION

The success of organizations (achievement of strategic goal) despite uncertain and ambiguous environment (Schoemaker et al., 2011; Al-Hakimi & Borde, 2020) is the fundamental reason for its existence, may it be operating in any setting i.e. private and public, purpose i.e. profit and non-for profit, size i.e. small, medium or large and context i.e. developed or developing economies. Considering its importance, organizational success manifested by performance outcomes has recently been extensively studied. Rauch et al., (2009) while conducting a meta-analysis up to 2007 found 100 studies investigating EO and performance. EO is one of the most important and established concept in the field of entrepreneurship (Rauch et al., 2009). Wales and

co-authors commented that the mediation mechanism in the relation of EO and OP is less studied phenomena (Wales, Gupta, & Mousa, 2011).

Basing mainly on the studies by Khandwalla (1972) and Mintzberg (1973), Miller (1983) conceptualised three dimensional entrepreneurial orientation construct. The proposed three dimensions were innovativeness, risk taking and pro-activeness (Miller, 1983). Covin and Slevin (1989) operationalised these three dimensions, combining it into one single factor (Covin & Slevin, 1989; 1991), while believing in uni-dimensionality of the concept. Lumpkin and Dess (1996) added two additional dimensions to the construct by Covin and Slevin (1989) i.e competitive aggressiveness and autonomy;

while arguing in favour of the multi-dimensionality of the phenomena (Lumpkin & Dess, 1996). Covin and Lumpkin, 2011 argued later that EO is a firm level trait or attribute recognisable through the consistent behavioural patterns (Covin & Lumpkin, 2011). According to strategic management literature, EO is conceptualised as a strategic orientation visible in a set of practices, processes, and decision making activities and characterised by the dimensions of risk taking, innovation, proactiveness, competitive aggressiveness and autonomy thereby making organisation more resilient to changes and disruptions (Miller, 1983; Covin & Slevin, 1989; Lumpkin & Dess, 1996; Wales et al., 2011), which contribute to attaining value creation and growth thus enabling survival and growth outcomes (Al-Hakimi & Borde, 2020). Various studies have concluded robust relationship between EO and organizational performance (Sok et al., 2017; Saha, Kumar, Dutta & Dutta, 2017). Rauch et al., found moderately large ($r=.242$) correlation between EO and OP in a meta-analysis study (Rauch et al., 2009), which is robust to different operationalisations of key constructs as well as cultural contexts. Sok et al., 2017 also concluded that EO is positively related to small firms in Australian context (Rauch et al., 2009).

Organizational resilience (OR) is defined as ability to plan for, respond to, and recover from emergencies and crises (Lee et al., 2013). Organizational resilience has been looked at as a characteristic, attribute, outcome, process and emerging phenomena (Chen, Xie, & Liu, 2021). The capability perspective, however has generated much interest in the business management, disaster management and strategic management scholars (Linnenluecke, 2015). Strategic perspective consider resilience as a developable quality through developing relevant capabilities and investing in related resources (Hillman, 2021). Despite lack of consensus on conceptualization and definition (Linnenluecke, 2015; Martin, Paredes & Wainer, 2018), common theme of what resilience addresses is 'survival' (Martin et al., 2018) and thriving in face of disruptions (Corey and Dietch, 2011; Asgary et al., 2012; Hillman & Guenther, 2021). Holling (1973) defined ecological resilience as "ability of systems to absorb change and disturbance and still maintain the same relationships between state variables" (Holling, 1973). Others define resilience as the capacity of the firm to survive, grow and adapt despite hazards and crisis (Dahles & Susilowati, 2015), and resistance to

shocks, renewal, and recovery or bounce back from shocks (Saad et al., 2021). Common themes are resisting the damage through preparation and mitigation (in human systems; due to their ability to anticipate through thinking, experiencing and learning), coping with shocks/disturbances, and bouncing back (imply the speedy recovery to function efficiently) to the pre-disaster levels some (not all) also include adapting to new normal (Duchek, 2020). This study however adopts definition given by McManus et al., (2008), defining organization resilience as a function of an organization's awareness of the overall situation, management of keystone vulnerabilities, and ability to adapt in a complex, dynamic, and interdependent environment (McManus, Seville, Vargo & Brundson, 2008; Stephenson et al., 2010). It has been measured with two dimensions of adaptive capacities and planning strategies (McManus et al., 2008, Lee et al., 2013; Whiteman et al., 2013).

Performance is multi-dimensional concept and relationship between EO and organisational performance (OP) depends upon the indicators used to assess the performance (Rauch et al., 2009). A reliable and valid organisational performance questionnaire could assist in efforts to improve organisational effectiveness and efficiency, maintaining competitive advantage and identifying aspects which need to be refined to improve effectiveness. This study adopted organisational performance questionnaire (OPQ) based on the Burke-Litwin Model (Olivier, 2018). The Burke-Litwin model of organizational performance (OP) differentiate between transformational and transactional segments of the organizations. Transformational component comprised of decision making echelons and transactional elements are lower level task performing echelons. Transformational component is directly affected by changes in external environment, which affect mission and strategy, leadership and culture of the organisation. In turn transactional elements of structure, systems, management practices and climate are affected. These changes to transformational and transactional elements affect motivation which in turn affect organisational performance (Burke & Litwin, 1992). Burki and Litwin (1992) model describes the outcome of work performance, effort, and achievement as well as the indicators thereof to include productivity, customer

satisfaction, and service quality; as represented by twelve elements (Olivier, 2018).

Remainder of the paper is structured around theoretical framework (section 1), literature review and hypothesis development (section 2), followed by research methodology (section 3), laying out findings (section 4), exploring significant results grounded in theoretical perspective of RBV and DCT under discussion portion (section 5) and further highlighting implications, contributions and sign posting for future research (section 6) before concluding the paper.

Theoretical Framework

Resource based view (RBV) emphasizes the role of resources and capabilities as key determinants of a firm's competitive advantage, core competencies and performance (Barney & Hesterly, 2019). These resources and capabilities can contribute to a firm's resilience, competitive advantage and performance (Newbert, 2008). RBV advocates identification, appraisal and accumulation of resources and capabilities that will enhance performance through development of core competencies, dynamic capabilities or standalone static articulation (Wernerfelt, 1984, Barney, 1991; Teece et al., 1997; Newbert, 2007; Barney & Hesterly, 2019). RBV refers to the heterogeneous and immovable tangible and intangible resources and capabilities (a subset of resources enabling firm to take full advantage of these resources) embedded in the firm. The distinction between resources and capabilities is that resources provide basis for the renewal or development of firm's capabilities, whereas capabilities are the key sources of competitive advantage and echo firm's ability to utilise these resources in deploy resources in various methods according to the turbulent business environment (Grant, 1991; Teece et al., 1997). Resources and capabilities must be characterized by valuable, rare, difficult to imitate, and non-substitutable (VRIN). These VRIN resources and capabilities can also be utilized either in the same form (static view) or could be reconfigured (dynamic view) in disaster situations, depending upon the parameters of uncertainty and dynamism of these situations (Newbert, 2007). Martin et al., 2018 proposed an integrative conceptualization of organizational resilience as, the measurable combination of characteristics, abilities, capacities or capabilities that allows an organization to withstand known and

unknown disturbances and still survive (Martin et al., 2018).

However, RBV lacks appropriate capabilities when dynamic and uncertain fluctuations occur in environments. Basing on RBV, dynamic capability theory (DCT) has emerged to address the challenges of dynamic nature of risk and change, which could not be addressed by static nature of RBV, through the sensing the internal as well as external changes, dynamic planning and reconfiguration of capabilities in order to respond to uncertain changes appropriately (Teece et al., 1997; Chowdhury & Quaddus, 2017). EO with its dimensions represented by the tendency to innovate, risk-taking, and be proactiveness, has a significant impact on developing dynamic capabilities (Al-Hakimi & Borde, 2020) and resilience (Chowdhery & Quddus, 2017).

Literature Review and Hypothesis Development **Organizational Performance**

In the context of EO research, organisational performance has been most extensively researched outcome variable (Rauch et al., 2009). Also overall positive effect of EO on firm performance regardless of the firm context. In their early theorizing, Covin and Slevin (1991) suggested firm performance to represent the ultimate dependent variable of firm-level entrepreneurship (Covin & Sloven, 1991). However, there is scarcity of formally theorised organisational performance measure in the literature resulting in interesting insights while examining the performance as outcome variable. Organisation performance is measured mostly in a subjective manner (perceptual assessment) by asking respondents, having significantly larger correlation between EO and nonfinancial performance measures, tendency to develop new measures instead of using the existing ones. Zahra (1993) suggested that the notion of firm performance in the Covin and Slevin (1991) model should be expanded to include non-financial indicators which demonstrate the success (or failure) of a firm's EO efforts (Wales et al., 2015). Rauch et al., (2009) found that EO has similar relationships with perceived financial performance, perceived nonfinancial indicators of performance, and archival performance. However, found strong correlation between EO and financial performance (both perceived and archival) but insignificant and small correlation between EO and perceived nonfinancial performance measures (Rauch, 2009).

The majority of EO–performance findings are based on subjective measurement by asking respondents for the relevant information or via archival indicators. Difficulty of obtaining objective data on various indicators in real –world contexts and high correlation between subjective and objective measures (Vij & Bedi, 2016), offers justifications for operationalising measures with subjective indicators. Rauch et al., (2009) claimed that the potential problem of common method variance, memory decay, or social desirability associated with self-reporting of performance does not generally pose a serious threat to the validity of the EO-performance relationship (Rauch, 2009). In light of suggestions for future research directions, In another analysis research piece suggested the need to investigate more tightly defined performance consequences (Gupta, 2017). Considering all above, this study adopted tightly theorised and validated measure developed in organisational and entrepreneurial context (Olivier, 2018). Organizational performance questionnaire based on Burke-Litwin Model contain eleven elements: external environment, mission and strategy, leadership, culture, structure, management practices, systems, work group climate, skills/job match, individual needs and values, motivation, and organizational and individual performance (Burke & Litwin., 1992; Olivier, 2018).

Entrepreneurial Orientation

EO is a strategic orientation by the organisation. Although the roots of the concept hinge on the studies by Khandwalla (1972) and Mintzberg (1973) but Miller (1983) is attributed for the conceptualization of the construct, who proposed three dimensions i.e innovativeness, risk taking and pro-activeness (Covin & Lumpkin, 2011). Covin and Slevin (1989; 1991) operationalised these three dimensions, combining it into one single factor (Covin, Slevin & Schultz, 1997), while believing in uni-dimensionality of the concept. Lumpkin and Dess (1996) added two new dimensions to the construct of EO i.e *competitive aggressiveness* and *autonomy* while arguing about the multi-dimensionality of the phenomena (Lumpkin & Dess, 1996). Covin and colleagues are of uni-dimensionality of the construct approach (Covin & Slevin, 1989; Rauch, 2009). Many scholars believe that EO could be measured as aggregate of all sub-dimensions (Sok, 2017; Saha, 2017). Lumpkin and Dess (1996) while proposing two additional

dimensions; developed an instrument believing in multi -dimensionality of the construct (Lumpkin and Dess, 1996; Rauch et al., 2009). Other scholars also argued that the independent dimensions could measure the firm’s performance independently (Saha et al., 2017). Following Lumpkin and colleagues, majority of the studies before 2009/10, measuring the EO and firm performance have taken five dimensions of EO. Since 2009 onwards the uni-dimensional construct (aggregate of five dimensions) of EO has gained popularity (Saha et al., 2017). However, the scarcity of empirical studies on examining the Lumpkin and Dess (1996) conceptualization of EO has been reported (Saha et al., 2017). Recently conducted literature reviews on EO (Wales, Gupta, & Mousa, 2011; Wales, 2015) supports this finding.

Organizational Resilience

Resilience is considered complex, multidimensional and multidisciplinary phenomenon (Rana, 2020). The term resilient originated from Latin word “*resilio*” meaning to jump back. The Oxford English Dictionary defines resilience as (1) the act of *rebounding or springing back* and (2) *elasticity* (Klien et al., 2003). Resilience has emerged as a concept for augmenting preparedness, coping and adaptive capacities, and curtailing the negative effects of shocks in organization (Rana, 2020). Organisation resilience as a latent hypothetical concept has been conceptualized as a capability (Rahi, 2019), inherent characteristics (Linnenluecke, 2015), function (McManus et al., 2008), emergent phenomena (Chen et al., 2021), outcome (Ambulkar, Blackhurst, Grawe, 2015), system property (Bhamra et al., 2011; Burnard & Bhamra, 2011; Martin et al., 2018; Barasa, Mbau1 & Gilson 2018), a trigger for entrepreneurial behaviour (Korber & McNaughton, 2017) and a process of recovery and transformation (Barasa et al., 2018); Krober & McNaughton, 2017).

Every discipline and domain of study have offered different conceptualisation and operationalisations of resilience (Lee et al., 2013; Linnenleuke, 2021; Hillman & Guinther, 2021) as per the study domain and application (Linnenluecke, 2015; Krober & McNaughton, 2017; Martin et al., 2018). In the domain of physical and engineering sciences, the properties of elasticity (absorbing and bouncing back) gets more obvious, in ecological domain returning back and maintaining previous state (stability) becomes pronounced (Lengnick-Hall, Beck, & Lengnick-Hall, 2011), in

psychological domain it is about bouncing back and adaptability (absorbing, coping and adaptive capacities) and in management and organizational studies it is about bouncing forward (absorbing, recovering, adapting and growth) (Manfield & Newey, 2017).

Many consider it a very useful concept to explain how organizations survive and thrive amidst adversity and turbulence (Bhamra, Dani, Burnard, 2011; Hillman, 2021; Chen, 2021), times of crisis and uncertainty (Stephenson et al., 2010; Chen et al., 2021), unexpected events and abrupt changes (Linnenluecke, 2015), massive discontinuities (Winn, Kirchgeorg, Griffiths, Linnenluecke, & Günther, 2010) and VUCA environment characterised by volatility, uncertainty, complex and ambiguous (Schoemaker et al., 2018).

Organizational resilience is mostly been viewed from two main outcome oriented philosophical perspectives; survival and growth. Survival oriented philosophical perspective is (bouncing back to the state before the perturbation) based resilience research is led by the ecosystem perspective, defined resilience as the amount of perturbation a system can sustain before changes occur in system's control and structure (Holling, 1973). This definition embody the notion of bouncing back to previous functional state or previous homeostasis (Manfield & Newey, 2017). In the bouncing back perspective organizational resilience is defined as an ability to plan for, respond to, and recover from emergencies and crises (Lee et al., 2013), and resistance to shocks, renewal, and recovery or bounce back from shocks (Saad et al., 2021) and ability of a system to deal with disruptive events (Rahi, 2019). Business organizations are required to absorb, recover and adapt to the disruptions with various probabilities, magnitudes and intensities (Winn et al., 2010; Rahi, 2019), a process that develops from a combination of cognitive and behavioral competencies at the organizational level as well as knowledge, skills, attitudes, and behaviors at the individual level (Lingneck-Hall and Beck, 2009). Linnenluecke, (2012) define resilience as organizational capacity to absorb the impact and recover from the actual occurrence of an extreme weather event (Linnenluecke, 2012). Growth oriented philosophical perspective underlined by notion of bouncing forward to new and better state and emerging more strengthened and resourceful after the disruptive event. This perspective focuses on

developing capabilities to successfully overcome future challenges and emerge from crisis stronger than before (Duchek, 2020). Mostly achieved by knowledge management, learning from own experience an experience of others and integrating lessons learnt in organizational components, process and capabilities (Duchek, 2020), innovation and exploiting arising opportunities. Organizational resilience in this perspective is normally defined as maintenance of positive adjustment under challenging conditions and emerging more strengthened and resourceful (Vogus and Sutcliffe, 2007), ability of an organization to effectively absorb, develop situation-specific responses to, and ultimately engage in adaptive activities to capitalize on disruptive surprises that potentially threaten its survival (Lingneck Hall, Beck & Lingneck Hall, 2011), and organization's capability to enable it to survive, adapt, recover, and even thrive in the face of unexpected and catastrophic events as well as turbulent environments (Ma et al., 2018) and capacity of the firm to survive, grow and adapt despite natural hazards and crisis (Dahles & Susilowati, 2015).

Following the first philosophical perspective of surviving, which embody absorptive, recovery and adaptive capacities, this study adopts definition by McManus et al., (2008), defining organization resilience as a function of an organization's awareness of the overall situation, its management of critical weaknesses, and its ability to adapt in a complex, dynamic, and interdependent environment (McManus et al., 2008; Stephenson et al., 2010). Situation awareness is defined as a measure of organization's overall understanding and perception of it whole operating environment and various stakeholders (McManus et al., 2008). McManus (2008) define the management of key stone vulnerabilities as the failure of those critical capacities and capabilities existing in the system may have near fatally threatening potential for the system as a whole. The adaptive capacities can be conceptualized as opposite side of the key stone vulnerabilities to some extent (McManus et al., 2008). Organization as system can adapt in different ways by applying suite of responses in various ways; either by applying existing responses to the problem in hand, and/or apply existing capabilities in novel ways to the new problem and/or develop novel response capabilities to apply these to the encountered problems (Dalziell and McManus

2004). More organic structures, open communications, empowerment, participative decision making and motivation enable a potent adaptive response. Some scholars have advocated inclusion of anticipation, sensemaking and awareness of environment, stakeholders, risks and new opportunities (McManus et al., 2008; Duchek, 2020). Resilience is the ability of a system to sustain, absorb and bounce back to original or new form to perform more efficiently when faced with disaster. Therefore it is posited that higher level of organizational resilience will lead to speedy recovery and better post disaster performance outcomes. It has been measured with two dimensions of adaptive capacities and planning strategies (McManus et al., 2008, Lee et al., 2013; Whiteman et al., 2013). At organizational level McManus et al., 2008 (3 factor ROR Model) offers a tools for measuring inter and intra organizational resilience named “Resilient Management Process”, she offered various indicators

under three main factors i.e. situation awareness, managing keystone vulnerabilities and adaptive capacities (McManus et al., 2008). Resilient Organization’s (ResOrg) 4 factor ROR Model. Two factors were dropped. New model with 2 factors and 14 indicators is adopted in 2013 (Lee et al., 2013).

Hypotheses and Conceptual Model

Considering above discussion following hypotheses are proposed:-

- H1: EO has a significantly positive relationship with OP.
- H2: EO has positive and significant impact on OR.
- H3: OR has positively and significantly affect OP.
- H4: OR positively and significantly mediates the relationship between EO and OP.

Hypothesized relationships, after exploring the existing literature are given in a schematic diagram as figure 1.

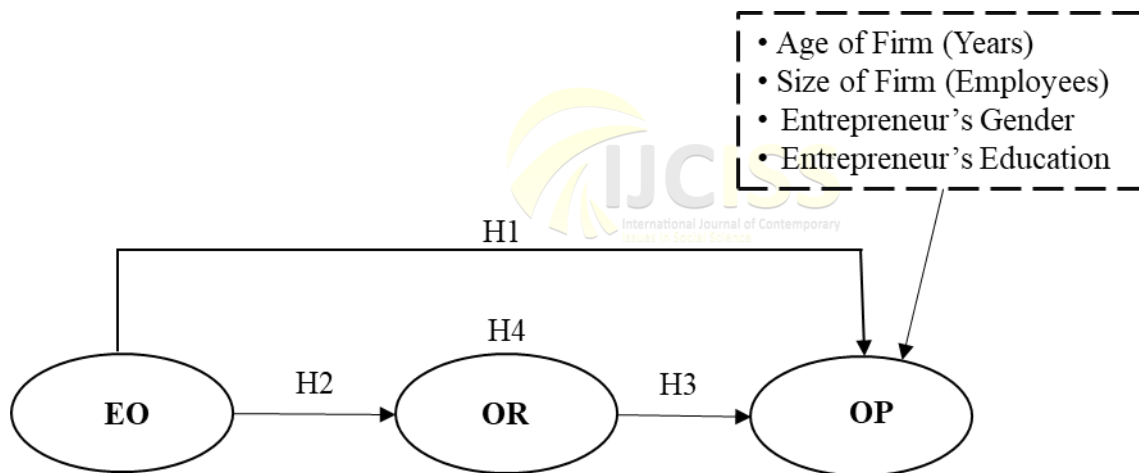


Figure 1. Conceptual framework

Research Methodology

Sample

This study is cross sectional and casual in nature, undertaken in the context of developing economies suggested by (Bharma et al., 2011). Population is composed of all the organizations where a formal structure with strategic decision and policy making systems are prevailing in Pakistan. It includes but is not limited to public (including armed forces) and private; profit (about 3.249 million economic establishments surveyed in Pakistan Economic Census of 2005) and non for profit/religious services (about 0.045 million); various sizes (SMEs 2. 958 million and large corporations 0.0016 million) and

from all the economic sectors (manufacturing, services, humanitarian and developmental sectors). To collect data utilizing adapted questionnaire composed of valid and reliable scales (table 1) was deployed through convenient sampling technique.

Measurements

Entrepreneurial Orientation (EO) was adapted from five-dimensional entrepreneurial orientation scale from the paper titled “A content adequate five-dimensional Entrepreneurial Orientation” by Kaustav Saha and co-authors (Saha et al., 2017). Organizational resilience was measured using 13 items, adopted from Business Resilience Thumbprint

Tool (McManus et al., 2008; Lee, Vargo, & Seville, 2013; Whitman, Kachali, Roger, Vargo, & Seville, 2013; Brown, Stevenson, Giovinazzi, & Vargo, 2014). Organizational performance scale was adopted from Organisational Performance Questionnaire (OPQ) developed and validated by Oliver (2018) based on twelve indicators of Burke and Litwin Model (Burke & Litwin, 1992; Olivier, 2018). All were measured on 5 points Likert scaled from 1 (strongly disagree) to 5 (strongly agree).

Data Collection Techniques

Data collection method integrated three modes of data collection of social media networks (SMNs) and collection through personal visits to universities offering business and management courses for professionals. This new data collection technique bore limited success. Survey questionnaire were developed both in soft and hard form. The online platform of “Google Forms” was used to design and circulate the form to potential respondents. In this case, social media services of “Facebook” and “LinkedIn” were used to reach target respondents. The wide spread use of “WhatsApp” mobile application warrants its adoption for data collection in future research. It was assumed that people with common interests normally join a specific group, page or follow and respond to feeds of interest. Therefore, relevant terms were used to search the groups of research interest and link of Google Form was shared with the detailed background of research, its variables; criteria for respondents and at the end a request to fill the survey form was made to all concerned members. Few of the terms used to locate the desired groups or pages used were “company”, “disaster”, “association” and “research” etc to locate the groups having admins and majority members from Pakistan. Members in a group were viewed manually for their nationality and only members qualifying the criteria were asked to fill out the survey form. Although the responses receipt ratio was very low but this technique intuitively seems very promising but needs further improvements and maturity in locating, targeting, soliciting and encouraging responders to increase the response ratio. Online method of collecting data was augmented by personal visiting the respondents and getting the survey forms filled. Although a convenient sampling technique by nature, a new approach was adopted. In the universities of twin cities of Islamabad and Rawalpindi, MS/MPhil/PhD

programmes in business, leadership and management are offered in the evenings for professionals. These programmes are attended by academicians, business managers, disaster managers, doctors, healthcare services managers and members of armed forces etc. Three universities National Defence University, Riphah International University and SZABIST were visited on weekends for collection of data from eligible professionals/managers. During visits purpose of the research, definitions of the variables and ambiguities, if any were addressed on the spot. This techniques enhanced the response rate. The interesting phenomenon observed was lack of interest in such research activity by some teachers and students alike. It may be attributed to weak research culture in Pakistan. Valid and usable responses received were 152 from both the techniques (41 and 111 from online survey and personal data collection respectively).

Data Preparation Techniques and Internal Consistency Analysis

Statistical Package Social Sciences (SPSS) version 21 was used for statistical analysis. Statistical approach proposed by Preacher and Hayes (2004) is adopted to study the mediation and moderation effect in the study model. Missing data treatment was resorted to using Little’s Missing Completely at Random (MCAR) test and Expected Maximization (EM) approach for making good the missing data. Little’s Missing Completely At Random (MCAR) test was applied to ascertain the randomness of missing data. In the MCAR test data is tested for hypothesis of either data was missing at random or not at random. H1 describes that “data is missing at random” and vice versa for Ho. The result was significant ($p < .004$). It means that the data was missing completely at random. After ascertaining that the data was missing at random, the “Expected Maximization (EM)” approach was adopted to treat missing data. It is one of the simplest and easy approaches for treating missing data. Anyway there were only four missing responses. Reliability was checked based on the Cronbach’s Coefficient (Chronbach, 1951) during the pilot study. Internal consistency of the scales was analysed through Cronbach Alpha value of 0.7, (Hinkin, 1998) and 0.68 (Whitman et al., 2013) suggests strong internal consistency. In main study, internal consistency of various variables was well above acceptable range (> 0.7) less OP (table 1). Confirmatory factor analysis

(CFA) was conducted for OP, which informed that item 9 was having low loading. However, said item was retained on the basis of being close enough to the criteria and literature review. Item 5 was deleted in final analysis due to very low loading. Utilizing

approach suggested by Baron and Kenny, (1986), Pearson correlation coefficient analysis, multivariate linear regression, mediation and moderation analyses were conducted (Baron & Kenny, 1986).

Table 1
Reliability (Cronbach's Alpha)

Ser.	Variables	Items	Cronbach Alpha	Reference Studies	Cronbach Alpha (Pilot Study)
1.	Entrepreneurial Orientation (OE)	15	0.924	Saha, 2017	0.809
2.	Organizational Resilience (OR)	13	0.950	Lee, Vargo, & Seville, 2013; Whitman, Kachali, Roger, Vargo, & Seville, 2013	0.829
3.	Organizational Performance (OP)	10	0.939	Oliveir, 2018	0.830 (with the item 5 deleted)

Results

Descriptive Statistics

The analysis reveal normal data distribution (table 3) with no outlier and no multi-collinearity issues (table 4 below). Demographic data was collected on gender, education, age of organizations and size (number of employees) of organization to investigate the impact of socio-demographic variables upon the relationship under study. There were 104 (100%) responded to the query, male respondents were 58 (55.8%) and 46 females (44.2%), whereas 47 (31.1%) respondents opted not to give information. For education only 101 (100%) responded to the item with 52 (43.4%) having master's degree, 35 (23.2%) graduation degrees and 14 (9.3%) as MPhil/MS degrees, whereas 50 (33.1%)

opting not to respond. As far as age of the organization is concerned, total of 60 respondents responded to the item of age of the organization, majority 53.3 % fell under the category of young businesses (1 – 10 years of operational age), followed by 15% (11- 20 years) and 15% (21 – 30 years), 3% (51 – 60 years) and 5% were beyond 60 years. Concerning the size of the organization, in terms of number of employees, 56 opted to respond to this item. Majority (64.3%) of the organizations fell in the category of medium organizations (11 – 499 employees), followed by large organization (beyond 500 employees) with 26.8% and small organizations (1 – 10 employees) with 8.9% organizations. Details of descriptive statistics of demographic variables are given at table 2 below.

Table 2
Demographic Variables

Gender		Frequency	Percent	Valid Percent
Valid	Female	46	30.5	44.2
	Male	58	38.4	55.8
	Total	104	68.9	100.0
Education				
Valid	Graduation	35	35	23.2
	Masters	52	52	34.4
	MS/MPhil	14	14	9.3
	Total	101	101	66.9

Age of the Organization (Years)				
Valid	1 - 10 Years	32	32	21.2
	11 - 20 Years	9	9	6.0
	21 - 30 Years	9	9	6.0
	31 - 40 Years	3	3	2.0
	41 - 50 Years	2	2	1.3
	51 - 60 Years	2	2	1.3
	Beyond 60 Years	3	3	2.0
	Total	60	60	39.7
Size of the Organization (Number of Employees)				
Valid	Small 1 - 10 Employees	5	5	3.3
	Medium 11 - 499 Employees	36	36	23.8
	Employees beyond 500 Large	15	15	9.9
	Total	56	56	37.1

Correlation Analysis

SPSS version 21 and Process v 3.2 written by Dr Andrew F. Hayes was used for bootstrapping regression analysis of the model, where the impact of EO was checked on OP with mediation by OR. Pearson Correlation analysis revealed that entrepreneurial orientation (EO) has positive and significant relationship (r .598, p < .000) with

organizational performance (OP). It is evident that one unit increase in the independent variable (EO) will increase outcome variable i.e. OP by about .506 units. Also organizational resilience (OR) has positive and significant relationship (r = .583, p < .000) with OP. It means that one unit increase in the OR as IV will cause .615 units increase in outcome variable i.e. OP (refer to table 3).

Table 3

Correlation Analysis

	N	Mean	Std. Deviation	1	2	3
	Statistic	Statistic	Statistic			
OE (1)	152	3.3188	.52871	1		
OR (2)	152	3.5797	.52631	.598**	1	
OP (3)	152	3.6604	.69240	.490**	.583**	1

Note. N=152; *p<.10; **p<.05; ***p<.000

Outcome variable=organisational performance (OP)

EO=entrepreneurial orientation; OR=organizational resilience; OP= organisational performance

Regression Analysis

The model explains about 61% variance with .99% confidence interval (R² .609, p .000). In analysis of variance (ANOVA) the value of F test is 43.921 with significance of .000 (F 43.921, p .000) means that the null hypothesis of ANOVA is rejected and the model explains the phenomena significantly. The t value is 6.846 with significance of 99% (t 6.846, sig = .000), means that null hypothesis of t test (that the coefficient for IV is zero) is rejected, which is to say that EO do cause a change in DV. The theory suggests that the higher EO will have positive impact on OP. The un-standardized coefficient suggests that a unit change in EO will change the OP (DV) by .609 units holding other variables constant. The un-

standardized coefficient value is positive, so the direction of change is positive.

The research model depict the relationships (paths) between the constructs on the proposed study model (fig 1). H1 evaluates whether EO is positively related to OP. The results revealed that EO has a significant impact (total effect) on OP (β =.490, t= 6.881, p < 0.000).

Hence, H1 was supported. H2 evaluates whether EO has a significant impact on OR. The results revealed that EO has a significant impact on OR (β=.220, t= 2.715, p < 0.007). Consequently, H2 was supported. H3 evaluates

whether OR is positively related to OP. The results showed that OR has a significant impact on OP ($\beta = .451$, $t = 5.569$, $p < 0.000$).

Resultantly, H3 was also accepted. The results are presented in Table 4.

Table 4
 Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Correlations			Collinearity Statistics		
	B	Std. Error				Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF	
1 (Const)	1.531	.313		4.889	.000	.912	2.150						
EO	.641	.093	.490	6.881	.000	.457	.826	.490	.490	.490	1.000	1.000	
(Const)	.578	.333		1.736	.085	-.080	1.237						
2 EO	.288	.106	.220	2.715	.007	.078	.498	.490	.217	.176	.643	1.556	
OR	.594	.107	.451	5.569	.000	.383	.805	.583	.415	.362	.643	1.556	
R	.609***												
F	43.921***												
R Change	.131												
F Change	31.013												
Note. N=152; * $p < .10$; ** $p < .05$; *** $p < .001$													
Dependent variable=organisational performance (OP)													
EO=entrepreneurial orientation; OR=organizational resilience; OP= organisational performance													

Mediation Analysis

Lastly, H4 examines whether OR mediates the relationship between EO and OP. The results shows that total effect (H1) was found positive and significant ($\beta = .490$, $t = 6.881$, $p < 0.000$). When the mediator was introduced into the model the effect was increased but the direct relationship remained significant ($\beta = 0.220$, $t = 2.715$, $p > 0.007$) while the indirect effect with the inclusion of mediator into the analysis was

also found significant ($\beta = 0.451$, $t = 5.569$, $p < 0.000$). See table 4 for details. Hence, the results revealed partial and complementary mediation by organisational resilience. This shows that the effect of entrepreneurial orientation on organisational performance passes partially through organisational resilience. Hence following Preacher and Hayes, 2004 & Zhao et al., 2010, H4 is accepted (Preacher and Hayes, 2004; Zhao et al., 2010).

Table 5
 Mediation Analysis

Hyp	Label	Coeff	SE	t	p	95% CI		Conclusion
						Lower	Upper	
H4	OE → OR → OP*							
	Total Effect	.642	.093	6.881	.000			Significant
	Direct Effect	.288	.106	2.175	.007			Significant
	Indirect Effect	.353	.047			.195	.498	Significant
* Partial and complementary mediation exist								

Discussion

Purpose of this study was to investigate the impact of entrepreneurial orientation (EO) on organizational performance (OP) and also explore role of organisational resilience (OR) as a mediator. A theoretical based approach was adopted to link and then check novel mediator discussed and tested in overall organisational, management and disaster management studies but not tested in the strategic entrepreneurial orientation and organisational performance context. The study found a significant impact of EO on OP. The outcome is consistent with the past studies in the context of firms (Lumpkin & Dess, 1996), SMEs (Wiklund & Shepherd, 2003), across societal cultures (Semrau, Ambos, & Kraus, 2016), young firms (Messersmith & Wales, 2013) and business performance (Rauch et al., 2009), where the positive relationship between entrepreneurial orientation (EO) and organizational performance (OP) were reported. Such studies are mainly conducted in developing economies contexts (Wales et al., 2011) therefore their findings lack the power of generalisability upon other cultural contexts (Wales et al., 2011). This study has investigated the relationship between EO and OP in developing economy context. The empirical evidence support the main effect found in theoretical and empirical studies. This shows that organization characterized by entrepreneurial strategic orientation towards proactively exploring opportunities, risk and challenge and innovatively pursuing opportunities through sensing, seizing and reconfiguring resources and capabilities will have a higher propensity for a better organizational resilience and subsequently desired performance.

This further strengthens the proclamation that organisations can benefit from entrepreneurial orientation capabilities to deal with the highly turbulent and competitive environment (Gupta et al., 2017). Hence, firm's entrepreneurial orientation by utilising dynamic capability (DCT) can mobilise and reconfigure requisite resources and capabilities thereby operationalising planned and adaptive strategies (Lee et al., 2013) thereby enhancing chances of success, effectiveness and efficiency. The study found a significant impact of OR enabling strategies on OP, hence validating the mediation hypothesis and are consistent with the findings of the previous findings (Zighan, Abualqumboz, Dwaikat, Alkalha 2021). The findings of this study provide important empirical insight into the indirect

influence of EO on OP through the mediation of OR. The results show that OR processes mediate the relationship between EO and OP.

Limitations, Significance and Future Calls

As the study is cross sectional with sample of 151 respondents, restricted to the provinces of KPK and Punjab of Pakistan, therefore the findings may be handled with care. The generalisability of the results is considered an issue. Inclusion of organisational resilience as a mediator in the model is a novelty. In the future, expansion of sample size, longitudinal study design, segregation of organizations as per the sizes and economic sectors to delineate the effects of EO on performance in developing economies contexts are recommended. Further theoretical and empirical studies to be undertaken to explore the possibility of other related variables being incorporated as moderators i.e. organizational psychocap (McKenny, Short & Payne, 2012) and social capital (Chowdhury, Prayag, Orchiston, & Spector, 2018). Future researchers can also study how the multilevel independent variables like individual PsyCap translate into organizational outcomes. More attention could also be paid to the role of gender in the context of EO and organizational performance. The positively rewarding side is already studied extensively and continued to be studied so. Future researchers are advised to consider being a devil's advocate and explore the dark side of the EO. Some lines of arguments are; aggressive competitiveness may result in intense competitions which may give rise to unethical practices and even downright illegal activities, pressures of risk taking resulting in stress with negative health consequences, innovativeness and proactiveness may ask for short circuiting in decision making loop resulting into mistakes and further loss of job or stressful working environments.

Conclusion

In last about four decades, if one area in entrepreneurship scholarship is studied extensively that could be entrepreneurial orientation (EO) especially in the context of organizational performance. Many studies have confirmed the main finding of this study before this study but exploring the mediation of resilience is an encouraging novelty. It is a step in the direction of expanding this discourse by looking at new mechanisms to enhance

organizational performance. The study has implications for scholars and practitioners concerned with business and management. The study undertaken is limited in sample and cross sectional design, which will impose limitation on generalisability of the results. Anyway, this was an attempt to explore new mechanisms, understand the effects of EO on OP in developing economies context to further expand the discourse and pave way for robust findings.

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