The Effect of Distributive Justice on Individual Entrepreneurial Dispositions and Team Performance among Self-Organized Team Ventures

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ABSTRACT

The study aims at assessing the effect of distributive justice on individual entrepreneurial dispositions and team performance among self-organized team ventures in Jiangsu province. The study adopted a cross sectional design with a sample of 350 entrepreneurial teams’ members. Quantitative data were collected from the participants through surveys. The data were analyzed through the use of AMOS 23.0 software package. The findings of the study revealed that proactiveness diversity among team members negatively affected team performance. Risking taking diversity was found to have a positive indirect influence on team performance through distributive justice whilst innovativeness diversity harness team performance. The findings revealed that distributive justice serves as a booster to the relationship between innovativeness and team performance. The findings of the study have contributed to deepening the understanding of individual entrepreneurial dispositions (entrepreneurial orientation at the individual level), team entrepreneurship and distributive justice thereby enriching literature in the entrepreneurship and justice fields. The study therefore recommends that entrepreneurs understand their team members individual dispositions as well as adopt practices that will enhance the perception of high distributive justice among their team members.

Key words: Entrepreneurial dispositions, distributive justice, self-organized, entrepreneurial teams, entrepreneurial orientation.

INTRODUCTION

Most entrepreneurship framework considers entrepreneurial agency solely within single enterprising individuals. Scholars such as Shane and Venkataraman (2000) define the field of entrepreneurship research to include the study of individuals who discover, evaluate and exploit opportunities. In their perspective of entrepreneurship, the focus is on individual differences in knowledge, alertness and creativity. It is argued that many leading economic theories of entrepreneurship hold onto this individualistic emphasis of entrepreneurship (Carland, Hoy, Boulton, & Carland, 2007; Casson, 2005). However, in recent times, much research work in the field of business has focused on entrepreneurial teams. Entrepreneurial teams are critical in venture creation as well as helping to address issues of unemployment. Research on founding teams often look at how such teams understand the nature of the venture opportunity, recognizing new or emerging opportunities, and getting to a consensus of what to do. Some scholars who focused on entrepreneurial
team formation such as Lechler (2001) concluded that entrepreneurial teams have received more recognition as an “omnipresent phenomenon” in modern economies and is widely considered to be “the superior entrepreneurial start-up concept”. To buttress the role of entrepreneurial teams on venture creation, Kamm, Shuman, Seeger, and Nurick (1990) stated that entrepreneurial teams are responsible for majority of the starts up created. Other scholars opined that firms founded by entrepreneurial teams are more likely to survive and to achieve faster growth than individuals who establish entrepreneurial ventures (Eisenhardt & Schoonhoven, 1996; Mintrom & Norman, 2009). In a similar research work on founding teams, Wright and Westhead (2003) proposed frameworks linking the size and composition of the team to the presence of the different types of knowledge which will help the new venture succeed, and the integration of perspectives among team members leading to consistency of actions in the marketplace. The results indicated that the presence of idea and knowledge diversity within such teams contribute to team learning and the venture’s ability to acquire additional resources necessary for its growth (Hayton & Zahra, 2005).

As team entrepreneurship research continue to expand, research on team diversity has addressed various person variables such as age, gender including functional background diversity and linked them to important team processes and outcomes. However, the clearly missing evidence in many of these team entrepreneurship studies is entrepreneurial orientation diversity and team performance, which this study sought to address. There are different views held by scholars on team members’ diversity. Some scholars have maintained that teams that are diverse regarding their perspectives, knowledge, experiences, or information can build upon and tap informational resources which foster higher quality decisions, superior solutions to work problems, and greater creativity, ultimately resulting in improved team performance (Van Knippenberg, van Ginkel, & Homan, 2013). On the other hand, researchers such as Byrne (1997) whose view on team diversity is based on the theory of similarity attraction believes that team processes and team outcomes are more favorable if team members are relatively similar to each other and suffer when there is dissimilarity among team members (Harrison & Klein, 2007). It is opined that diverse teams suffer from increased interpersonal conflict and its resultant decrease in team performance (Fisher, Bell, Dierdorff, & Belohlav, 2012). In the field of team entrepreneurship, entrepreneurial orientation (EO) has become a central concept in the domain of entrepreneurship and has received a substantial amount of theoretical and empirical attention. Some scholars have argued that though entrepreneurial orientation has been extensively researched, little work has been done in terms of team diversity within entrepreneurial orientation (Wales, 2016). According to Covin and Lumpkin (2011), EO has mostly been dealt with as a firm-level construct hence defined as a firm’s general or lasting direction of thought, inclination, or interest pertaining to entrepreneurship. Firm level approach to EO is basically centered on the CEO’s view of the firm and EO has been empirically found to influence performance (Rauch, Wiklund, Lumpkin, & Frese, 2009).

Worth noting is that previous studies on firm-level approaches did not consider the potential existence of differing EO views within teams and how these different views affect team functioning and outcomes. This study therefore premised on EO on the firm level to examine the individual and team level thereby offers a new dimension to enhance the understanding of the processes and outcomes surrounding EO and entrepreneurial teams. Although, many researchers have categorized EO dimensions to include the following: innovativeness, proactiveness, risk taking, competitive aggressiveness and autonomy, this study limits itself in terms of risk taking, innovativeness and proactiveness.

The present study examines the concept of EO at the individual level. We argue that differences in team members’ disposition to act entrepreneurially thus at their individual level entrepreneurial orientation (iEO) primarily brings about key outcomes of entrepreneurial teams. In this view, the researchers raise the question: What happens to team performance when members of entrepreneurial teams differ in their EO dimensions (risk taking, proactiveness and innovativeness).

Despite the growing importance of entrepreneurial teams to venture creation, growth and sustainability, the issue of perception among team members about whether they get fair share of everything in relation to the business can affect it. In the event that members perceived that they are not getting fair share of the benefits from the business, it will negatively affect their performance. Perception of unfair treatment can also result into situation of poor interaction/communication which can lead to some team members quitting from the venture. On the other hand, in cases whereby team members...
perceived that they are getting fair treatment from the venture, their performance will be positively affected. The perception of fairness among entrepreneurial team members has the potential of affecting their entrepreneurial orientation diversity in the business. However, little research has been carried to assess how the perception of justice relates with team diversity and team performance. This study believes that, the perception held by team members regarding whether they get a fair share of the business outcome is very important. The study advances the point that distributive justice plays an important role on how team diversity influences team performance. In situations whereby team members perceive the existence of justice in the business, they will positively pursue these diversities, which will influence team performance. On the other hand, where team members perceive that there is no distributive justice, they will not pursue their diversities even if they believe such will benefit the business. That is to say, whether team members exhibit their individual differences in the business or not is influenced by their perception of distributive justice.

2. Literature Review, Theoretical Background And Hypotheses

This section deals with a thorough discussion of critical theories that are fundamental to the study. Under this section, we also conduct a thorough review of literature leading to building the conceptual framework of the study. Hypotheses are formulated at the end of reviewing key constructs underlying the research.

2.1 Distributive justice.

According to Frankena (1962) justice, whether social or not, seems to involve at its center the notion of an allotment of something to persons thus duties, goods, offices, opportunities, penalties, punishments, privileges, roles, status, and so on. Moreover, Frankena (1962) stated that at least in the case of distributive justice, it seems centrally to involve the notion of comparative allotment. Distributive Justice is defined as perceived fairness of how rewards and costs are shared by or distributed across group members (Forsyth, 2006).

In the viewpoint of Colquitt and Zipay (2015), individual-level research has indicated that distributive justice, procedural justice, and interactional justice are not only empirically distinguishable from one another but also yield unique effects on different work outcomes. According to Walster, Walster, and Berscheid (1978), employees attach more significance to justice because it gives them control in forecasting and achieving desired economic and material outcomes. Here, the researchers argue that not only do employees attach more significance to justice but also entrepreneurial team members. Thus, when team members hold the perception that rewards, treatments and resources are allocated fairly, it will motivate them to put in their best in the business since the harder a member works, the more rewards and resources he or she will enjoy.

2.2 Entrepreneurial Orientation (EO)

Entrepreneurial orientation is deep rooted in the strategy making process literature (Mintzberg, 1973). According to Hart (1992) strategy making is an activity in every organization which incorporates planning, analysis, decision making, and many aspects of an organization’s culture, value system, and mission. EO represents the policies and practices that provide a basis for entrepreneurial decisions and actions. Thus, EO may be viewed as the entrepreneurial strategy-making processes that key decision makers use to enact their firm’s organizational purpose, sustain its vision, and create competitive advantage. An entrepreneurial orientation may contribute to higher performance by facilitating a team member’s capacity to identify innovative opportunities with potentially large returns and benefits.

Entrepreneurial orientation in the past has largely been centered on a firm level. The firm level approach to EO has typically revolved around the CEO’s view of the firm (Rauch et al., 2009) and has undoubtedly produced many valuable insights to entrepreneurship and management research and practice. Some scholars opined that this approach has resulted in a situation where many researchers did not extend their scope to cover the individual level of analysis (Wincent, Thorgren, & Anokhin, 2014). As such, prior firm-level approaches neglected to consider the potential existence of differing EO views within teams and the meaningful consequences of conflicting views for team functioning and outcomes.

There is a growing interest in recent times indicating that EO of individual organizational members can decisively shape important firm outcomes and for that matter, researchers such as Keil, Maula, and Syrigos (2017) and Palmer, Niemand, Stöckmann, Kraus, and Kailer (2019) empirically investigated the EO at the individual level (key decision makers such as CEOs) in firms. As a study which is directed at individual level analysis, the researchers in this
study measure entrepreneurial orientation as an individual disposition whilst relying on the principles of firm level entrepreneurial orientation research.

2.2.1 Entrepreneur innovativeness diversity and team performance

Innovativeness is the predisposition to engage in creativity and experimentation through the introduction of new products/services as well as technological leadership via research and development (R&D) in new processes. Innovativeness entails the need to renew, innovate and seek new opportunities (Miller, 2011). In the view of Rauch et al. (2009), innovation involves a tendency to engage in creativity and experimentation, through research and development, and to support initiatives that can result in new products, services or processes. According to Abbate and Cesaroni (2017), innovativeness may perform activities that imply the collection and use of information about customers’ current and prospective needs to discover, interpret, and pursue market opportunities that are not recognized by competitors. Liu and Atuahene-Gima (2018), established that innovation in terms of creativity in the area of marketing can predict better product performance.

In team ventures, innovative ideas or actions demonstrated by team members are of two categories. We have the adaptors and the innovators. According to Kirton (1984), team members who exhibit the adaptors traits typically engage in improving existing solutions and making things better and more efficient. Such individuals are not interested in novel things/ideas but interested in working to enhance the existing ideas or things. In teams, adaptors take it upon themselves to increase the efficiency of the work and ensuring that continuity and stability are achieved (Miron, Erez, & Naveh, 2004). On the other hand, Kirton (1984) opined that innovators in the business constantly engage themselves on introducing new and unexpected ideas and thus involve in doing things differently. Buttner and Gryskiewicz (1993), further stated that innovators are the ones who break with previously defined restraints, processes, and paradigms.

In every organization, both adaptors and innovators are needed to spearhead sustainability and innovation. In the view of Kirton (1984) both categories have strength and weakness, therefore, the presence of an adaptor’s weakness will be minimized by an innovator’s strength. A study conducted by Kollmann, Stöckmann, Meves, and Kensbock (2017) revealed that entrepreneurial innovativeness diversity positively and significantly influences team performance. Previous studies have also established the importance of innovativeness diversity among entrepreneurial teams indicating that teams composed of both creative and conformist members produce superior innovation performance (Miron-Spektor, Erez, & Naveh, 2011). In buttressing the relevance of innovativeness diversity in team entrepreneurship, Harrison and Klein (2007) revealed that innovativeness diversity positively affects team performance as it leads to a greater variety of information that the team can build upon. From the review of literature, the following hypothesis is formulated.

H1: Innovativeness diversity of entrepreneurial team members positively and statistically influences team performance.

2.2.2 Risk taking diversity, distributive justice and team performance

Risk taking involves bold actions by venturing into the unknown, borrowing, and/or committing significant resources to ventures in uncertain environments. In this paper, risk taking is viewed as a calculated bold decision that individuals in businesses undertake in relation to uncertain business environment. Risk-taking orientation is regarded as having a direct relation with the likelihood of seizing beneficial deals and, in general, is positively related to success (Frese, Brantjes, & Hoorn, 2002). Risk taking is associated with the personality and kind of relationship the individual has with others (Galvan, Hare, Voss, Glover, & Casey, 2007). F. Zhang, Yang, Xu, and Zhu (2018) revealed that risk taking propensity positively influences firm innovation performance. Despite previous studies account for a negative relationship between risk-taking and performance, it is in the nature of entrepreneurship to engage in risk-taking activities in return for expected rewards (Gebregziabher & Tadesse, 2014). In entrepreneurial teams, risk taking is relevant since team members may commit a significant portion of their resources toward pioneering projects with high technological and market risks, uncertain returns and significant chances of costly failure (Díaz-González & Camelo-Ordaz, 2016).

Risk taking behavior among people differs. There are the risk lovers and risk averse in every society. In entrepreneurial teams, these types of risk-taking behaviors are likely to prevail. Each of these risk-taking behaviors will have an influence on team members as well as the performance of the team. Risk lovers are willing to take risk with the anticipation of deriving future profit (Zaleskiewicz, 2001) and act confidently, even when there is high
levels of uncertainty in the environment. For risk averse individuals, risk is seen as undesirable and therefore they try to avoid it (Yi & Wang, 2015), and are not readily moved to risk even if the reward is future profit (Zaleskiewicz, 2001). Therefore, risk averse individuals will be more skeptical over risky decisions that have the potential of adversely affecting their investment in the business and for such a team member, a highly risky action such as taking the firm’s future on one single action must be perceived as unreasonable and irrational. It is arguable that in respect to decision-making logic, differences in risk taking among team members may not yield any fruitful and exchange of novel innovation.

In an entrepreneurial team, team members will be willing to undertake calculated risk when they believe that they get fair allotments from the business which results from their decisions. In entrepreneurial teams where team members perceived the prevalence of justice, risk lovers will be careful in taking risky decisions and would only take calculated risk that will be a motivation to the group hence promoting team performance positively. This argument is therefore, based on the point that distributive justice in entrepreneurial teams plays an important role in the relationship between risk taking diversity of team members and team performance. The researchers believe that risky decisions that turn to benefit the business will energize and serve as an accolade for the group to put in more efforts in the venture, which can enhance team performance. Since risky decisions in this study are associated and classified as calculated risky decisions, the researchers are of the view that risk taking diversity does influence team performance. From the above, we propose the following hypothesis

H2: Team members risk taking diversity does not directly influences team performance but through distributive justice such that risk taking diversity and team performance positively associate with distributive justice.

2.2.3 Proactiveness and team performance.

Proactiveness is an opportunity-seeking, forward-looking perspective characterized by the introduction of new products and services ahead of competition and acting in anticipation of future demand. Indeed, it is a fundamental attitude for firms to achieve competitive advantage and innovate (Ferreira, Marques, Bento, Ferreira, & Jalali, 2015). It has been argued that proactive firms are far ahead of their competitors in finding profitable opportunities and taking initiatives that enhance competitive advantage, which would allow to charge higher prices than their rivals (Craig, Pohjola, Kraus, & Jensen, 2014). According to Abbate and Cesaroni (2017), proactiveness component of EO may perform activities that imply the collection and use of information about customers’ current and prospective needs to discover, interpret, and pursue market opportunities that are not recognized by competitors. Lee, Cho, Baek, and Choi (2017), indicated that directors with proactive behavior have the ability to improve the financial performance of their firms.

Relating proactiveness diversity to team members, Bateman and Crant (1993) stated that individuals with high proactiveness actively scan their environments for opportunities, show initiative, rely on their own competence, and actively change circumstances around them. Z. Zhang, Wang, and Shi (2012) opined that for dyad team members with the same level of proactiveness means they have similar goals in managing their venture. That is to say, common preferences for either actively seeking or exploiting opportunities or for passively adapting to circumstances. They went further to say such level of shared proactiveness will promote positive dyadic relationship, facilitate interaction between individuals as well as enhance task coordination and mutually agreed goal setting (Z. Zhang et al., 2012).

On the other hand, in an entrepreneurial team where members differ in proactiveness will lead to disagreements over certain decisions such as when having to identify potential courses of action, choose between alternative strategies, or decide upon the pursuit of plans or ideas between the high proactiveness and the low proactiveness team members. Buttressing the negative effects of diverse proactiveness among team members, Harrison and Klein (2007), asserted that individual differences in proactiveness within a team are expected to reflect discrepancies among team members on task-relevant issues which will negatively affect team functioning. It is further argued that diversity as separation has the potential of reducing rate of recurrence and efficacy of a team’s interactions (Amason, Shrader, & Tompson, 2006). Furthermore, empirically, Kollmann et al. (2017) established that individual entrepreneurial disposition in terms of proactiveness negatively affected team performance. Based on the above review, the following hypothesis is formulated.

H3: There is a negative relationship between proactiveness diversity and team performance.

2.3 Distributive justice, innovativeness diversity and team performance.

The concepts of justice and fairness which have their route in organizational setting among employees
(Sheppard, Lewicki, & Minton, 1992) and are generally referred to as organizational justice is also an important element in the entrepreneurial setting especially in team entrepreneurship. It is reasonable to assume that employees want fair and just treatment in the workplace (Deutsch, 1985) and so also entrepreneurial team members. Greenberg (1990) stated that organizational justice is a basic requirement for the smooth functioning of organizations as well as personal satisfaction of the individuals they employ. The existence of justice or fairness among team members will positively influence them in their dispositions in the area of innovativeness, proactiveness and risk taking. Also, according to cognitive consistency theories (Festinger, 1957) the perception and subsequent feelings of inequity create tension resulting in dissatisfaction, anger and guilt. This can translate to negative consequences for team performance hence distributive justice is very essential among team entrepreneurs.

Emphasizing on the importance of distributive justice on organizational and individual performance, many scholars have established that distributive justice positively influences the relationship between organizations and individual as well as organizational performance (Whitman, Caleo, Carpenter, Horner, & Bernerth, 2012). In their study, Breugst, Patzelt, and Rathgeber (2015) revealed that among entrepreneurial teams where high perceived distributive justice prevailed facilitated team interaction and help overcome the challenges of novelty which brought about development of trust. Their empirical evidence revealed that low perceived justice of equity distribution among entrepreneurial teams represented a detrimental foundation for team interactions generating adverse team interaction spirals and subsequently led to reduced team stability and team performance.

In an entrepreneurial team where team members perceived the existence of distributive justice, individual team members’ diversity in innovativeness will lead to better exchange of information and pursuit of mutual beneficial ideas. The feeling that members get what is due them based on their contribution in the business will encourage both innovators and adaptors in their decisions thereby foster the relation between innovators and adaptors hence positively influencing team performance. Based on this argument, the researchers advanced the point that distributive justice serves as a booster on the effect of innovativeness diversity on team performance.

From the above, we propose the following hypothesis:

H4: Distributive justice mediates the relationship between innovativeness diversity and team performance.

2.4 Conceptual framework

The researchers developed the conceptual framework based on the review of literature on the constructs under consideration. The framework seeks to explore the link among the EO diversities, distributive justice and team performance.

**Figure 1 Conceptual framework**

3 Methodology

This study seeks to discover how entrepreneurial orientation diversity among team members influence team performance. The paper also seeks to establish how distributive justice boosts the relationship between entrepreneurial orientation diversities and team performance. The researchers adopted quantitative method in the data collection and analysis process. As a way of measuring the constructs, testing and verifying our hypotheses, the researchers administered a survey to entrepreneurial team members. The study spent almost five months administering the survey to the respondents covering entrepreneurial orientation diversity through distributive justice to team performance. In all, the researchers administered 410 questionnaires and 350 were successfully answered and retrieved from the respondents. The respondents were from team ventures. The researchers first identified businesses owned by more than one entrepreneur in Jiangsu province. The study then proceeded with administering the questionnaires to the team members. The respondents were from 203 team ventures in the province. The study revealed that 212 were men constituting 60.6 percent whilst 138 were females representing 39.4 percent. The study further indicated that 40.3 percent of the participants aged between 31 to 40 years. 27.1 percent were within the ages of 21 to 30 years. 18.9 represented participants aged between 41 to 50 years whilst 51 and above and below 20 years accounted...
for 11.1 and 2.6 percent respectively. These businesses were within their early ages and need to take strategies, innovative ideas and paths, which will keep them relevant and competitive enough to sustain and grow their businesses. Private schools and restaurants in China are faced with dynamic and rapid changes in innovative ideas and customers preferences where members of entrepreneurial teams have to take key strategic decisions of the firm to have competitive advantage over others (Kreiser, Marino, & Weaver, 2002). These business ventures have been operating for at least a year. Therefore, considering such ventures in this study is very important since these businesses continue to employ many workers in china and contribute to national development.

The study used structural equation model (SEM) to analyze the data through the application of AMOS 23.0 software. The use of structural equation model in this study is appropriate since it takes a confirmatory approach to analyze data by stating specific relationships among variables (Teo, 2013). The application of SEM also enables the researchers to assess the factorial validity of the questions which make up the scales by revealing the extent to which it is likely to measure identical concepts or variables (Hardy & Bryman, 2009).

3.1 Measuring of constructs.

The researchers measured all the constructs in this study using a five Likert-scale whereby respondents had to choose from strongly disagree to strongly agree. The study measured risk taking by five indicators adopted from (Wiklund & Shepherd, 2011). Risk taking was measured by questions such as “Team members have a strong proclivity for high-risk projects” and “Owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm’s objectives”. The researchers measured innovativeness using three indicators based on the Kuckertz and Wagner (2010) approach of measuring adaption innovation. Questions such as “Changes in product or service lines have usually been quite dramatic” and “No new lines of products or services”. In order to measure proactiveness, the researchers adopted the scale used by (Florin, Karri, & Rossiter, 2007). The study adopted this scale of measure due to its ability of predicting relevant outcomes such as entrepreneurial intention and job performance. The study measured team performance based on a broader spectrum of group outcome. The choice was in a response to calls by some scholars for the need to include multifaceted nature of measuring team performance (Horwitz, 2005).

Measuring team performance in this perspective addresses scholars views that assessing team performance should be broaden to include aspects of effectiveness and efficiency (Horwitz & Horwitz, 2007). The study therefore specifically adopted the modified version of Henderson and Lee (1992) efficiency and effectiveness scale to measure team performance. Distributive justice was measured based on the equity principle where the distribution of benefits and burdens is just if the benefits and burdens in question are allocated according to individuals’ current contributions and efforts. The researchers adopted Sauer, Valet, and Meyer (2014) equity items to measure distributive justice among team entrepreneurial ventures. Four items were used to measure distributive justice. For instance, “It is just if hard working team member earns more than the other member(s)” and “It is just if every team member receives only that which has been acquired through their own efforts”.

3.2 Dummy variables.

Various factors affect team performance measurement. Variables such as gender differences, team members age and firm age have the potential of affecting team performance and need to be included in the study to see whether such variables really have influence on team performance or not. The study treated team members’ age, firm age and gender differences as control variables.

3.3 Reliability and validity checks of constructs.

It is always important to conduct validity and reliability checks to ensure that the data collected adequately reflect the intended constructs measurement in the study. The need for reliability and validity test are key especially in psychological scales used in measuring human behavior (Thompson, 2003). According to Hair, Ringle, and Sarstedt (2013), it is always important to verify that measurement scale accurately represents the concepts to be measured. The study achieved unidimensionality for the constructs considered in the study since the factor loadings of all the constructs exceeded 0.70 which is mostly recommended for established items. Internal reliability was achieved as the Cronbach’s Alphas of the constructs which were calculated from SPSS exceeded 0.70. Some scholars have underscored the importance of composite reliability (Hair et al., 2013) and the values of CR were above 0.6 revealing that compositiy reliability was confirmed. The AVE were all above 0.5
acceptable threshold. Table 1 shows the reliability values of the data analysed.

Table 1 Measurement models and Reliability of constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Factor loadings</th>
<th>CR</th>
<th>AVE</th>
<th>Cronbach Alpha</th>
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<tbody>
<tr>
<td>RiskT</td>
<td>R1</td>
<td>0.78</td>
<td>0.933</td>
<td>0.735</td>
<td>0.876</td>
</tr>
<tr>
<td></td>
<td>R2</td>
<td>0.77</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>R3</td>
<td>0.746</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>R4</td>
<td>0.70</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>R5</td>
<td>0.78</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Innov</td>
<td>IN1</td>
<td>0.799</td>
<td>0.933</td>
<td>0.730</td>
<td>0.816</td>
</tr>
<tr>
<td></td>
<td>IN2</td>
<td>0.773</td>
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<td></td>
<td>IN3</td>
<td>0.771</td>
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<tr>
<td>DistT</td>
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<td>0.95</td>
<td>0.818</td>
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<td></td>
<td></td>
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<td></td>
<td>Dist3</td>
<td>0.831</td>
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<tr>
<td></td>
<td>Dist4</td>
<td>0.963</td>
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<tr>
<td>Project</td>
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<td>0.868</td>
<td>0.568</td>
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<td></td>
<td>Proj2</td>
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<td>Proj3</td>
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<td>Proj5</td>
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<td>TP3</td>
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<td>TP4</td>
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<td>TP5</td>
<td>0.877</td>
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</tbody>
</table>

Source: Authors survey results

Validity issues in research are very important and therefore, the study undertook a validity measure of the data. The results of AVE above 0.5 also means that convergent validity was achieved. Table 2 represents convergent validity results. In terms of construct validity the data is valid since all the fitness indexes were achieved. Table 3 represents the fitness indexes. The study also revealed that there were no redundant items in the model since all modification indices (MI) were below 15. Also, discriminant validity was achieved since all the square roots of AVE values are higher than the values of correlation between the constructs. Table 4 presents the discriminant validity values. Table 5 presents the summary of validity and reliability values of the constructs.

Table 2 Convergent Validity

<table>
<thead>
<tr>
<th>CR</th>
<th>AVE</th>
<th>MSV</th>
<th>Mod(R2)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.735</td>
<td>0.156</td>
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<td>Project</td>
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<td>0.700</td>
<td>0.007</td>
</tr>
<tr>
<td>Innov</td>
<td>0.914</td>
<td>0.600</td>
<td>0.146</td>
</tr>
<tr>
<td>RiskT</td>
<td>0.861</td>
<td>0.568</td>
<td>0.036</td>
</tr>
<tr>
<td>DistT</td>
<td>0.950</td>
<td>0.826</td>
<td>0.023</td>
</tr>
</tbody>
</table>

Source: Authors survey compilation

Analytical approach and results

The researchers used AMOS 23.0 software to analyze the data. The researchers first, performed a confirmatory factor analysis to establish whether the indicators adequately measured the constructs. The results reveal that all the indicators well measured the constructs as indicated in figure 2. The results also revealed that the model was fit as indicated by the fitness indexes in table 3. In order to test our hypotheses, we conducted path analysis in SEM. The first model did not include the mediator. Table 6 shows the results extracted for the direct effects of the control variables and the three entrepreneurial orientation diversities on team performance. As indicated in table 6, all the three control variables in the study do not have significant effect on team performance. The coefficient value of the age of respondents on team performance is -0.012 with a p-value of 0.81 whilst venture age shows a coefficient value of 0.049 with a p-value of 0.33. The beta of gender on team performance is 0.009 with a p-value of 0.85.

The path analysis shows that innovativeness diversity has a regression value of 0.36 with a p-value of 0.001 on team performance. This implies a positive and significant effect of innovativeness diversity on team performance indicating that a unit change in innovativeness diversity will result in 0.36 or 36
percent change in team performance. As it was expected, the results supported hypothesis H1. 
Also, the results of the path analysis show a standardised regression value of 0.055 for risk taking diversity with 0.261 as its p-value. This indicates that risk taking diversity does not have direct effect on team performance. The results supported the first part of hypothesis H2. In addition, the analysis reveals that entrepreneurial proactiveness diversity regressed -0.020 on team performance with a p-value of 0.034. This means that proactiveness diversity negatively influences team performance. The effect is statistically significant since the p-value is less than 0.05. This means when proactiveness diversity changes by a unit, team performance will change by -0.020. The results further supported hypothesis H3.

**Figure 2 Confirmatory factor analysis.**

![Confirmatory factor analysis](image)

**Table 6 Direct effects**

<table>
<thead>
<tr>
<th>Path</th>
<th>Estimate</th>
<th>Std.Error</th>
<th>P values</th>
</tr>
</thead>
<tbody>
<tr>
<td>TotalTP &lt;-&gt; TotalProa</td>
<td>-0.620</td>
<td>0.006</td>
<td>0.034</td>
</tr>
<tr>
<td>TotalTP &lt;-&gt; TotalDiss</td>
<td>0.261</td>
<td>0.074</td>
<td>***</td>
</tr>
<tr>
<td>TotalTP &lt;-&gt; TotalRiskT</td>
<td>0.655</td>
<td>0.047</td>
<td>0.261</td>
</tr>
<tr>
<td>TotalTP &lt;-&gt; Gender</td>
<td>0.648</td>
<td>0.345</td>
<td>0.889</td>
</tr>
<tr>
<td>TotalTP &lt;-&gt; Age</td>
<td>-0.038</td>
<td>0.368</td>
<td>0.921</td>
</tr>
<tr>
<td>TotalTP &lt;-&gt; VentureAge</td>
<td>0.181</td>
<td>0.206</td>
<td>0.379</td>
</tr>
</tbody>
</table>

**Source: Authors' compilation**

**Mediating Effects**

In order, to test for the mediation effect of distributive justice on the relationship between the two entrepreneurial orientation diversities and team performance, the researchers used Preacher and Hayes (2008) bootstrapping method at a 95 percent confidence level to determine the significance levels of the mediation effect. A bootstrap of 5,000 was used. A second model which included the mediator (distributive justice) was performed. Table 8 and 9 display the results of the mediation anlysis and effects.

The result revealed a positive indirect effect of risk taking diversity on team performance ($\beta = 0.024$ at 95 percent confidence interval) with lower limit confidence interval (LLCI) of 0.201 to an upper limit confidence interval (ULCI) of 2.59. The indirect effect of risk-taking diversity is statistically significant at 0.05 since the confidence level here does not include zero. This confirms hypothesis H2 indicating the mediation effect of distributive justice on the relationship between risk taking diversity and team performance. The results showed an indirect coefficient value of 0.035 with its LLCI of 0.066 and ULCI of 1.90. The mediation effect of distributive justice on the relationship between innovativeness diversity and team performance is statistically significant at 0.05 as zero is not included in the confidence interval. This confirms hypothesis H4.

**Table 7 Mediation effects**

<table>
<thead>
<tr>
<th>Paths</th>
<th>Estimate</th>
<th>Std.Error</th>
<th>P values</th>
</tr>
</thead>
<tbody>
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<td>0.063</td>
<td>0.044</td>
</tr>
<tr>
<td>TotalDiss &lt;-&gt; TotalDiss</td>
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<td>0.064</td>
<td>0.015</td>
</tr>
<tr>
<td>TotalDiss &lt;-&gt; TotalProa</td>
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<td>0.344</td>
<td>0.883</td>
</tr>
<tr>
<td>TotalITP &lt;-&gt; Age</td>
<td>-0.013</td>
<td>0.168</td>
<td>0.798</td>
</tr>
<tr>
<td>TotalITP &lt;-&gt; VentureAge</td>
<td>0.045</td>
<td>0.205</td>
<td>0.368</td>
</tr>
<tr>
<td>TotalITP &lt;-&gt; TotalProa</td>
<td>-0.021</td>
<td>0.067</td>
<td>0.04</td>
</tr>
<tr>
<td>TotalITP &lt;-&gt; TotalDiss</td>
<td>0.027</td>
<td>0.008</td>
<td>0.035</td>
</tr>
<tr>
<td>TotalITP &lt;-&gt; TotalDiss</td>
<td>0.366</td>
<td>0.075</td>
<td>***</td>
</tr>
</tbody>
</table>

**Source: Authors survey results**

**Table 8 Mediation analysis results**

**5 Discussion**

Entrepreneurial teams have been recognized as instrumental phenomenon in modern economies and is widely considered as a superior entrepreneurial start-up concept (Lechler, 2001). This study assesses the effect of distributive justice on team members’ entrepreneurial orientation diversities and team performance. The findings of the study indicated that innovativeness diversity positively influences team performance. The findings are in line with Kollmann et al. (2017) empirical study on dyadic teams that innovativeness diversity enhances team performance. The findings also highlighted that risk-taking diversity of team members do not have any direct influence on team performance and that risk-taking diversity only indirectly influences team performance through distributive justice. However, this findings
was contrary to Kollmann et al. (2017) findings that risk taking diversity harms team performance as it increases relationship conflict. The findings deepen Breugst et al. (2015) evidence that in entrepreneurial teams high perceived distributive justice facilitated team interaction and help overcome the challenges of novelty to bring about development of trust. This means that distributive justice in team ventures is very important since it serves as an anabolic resource to team performance. The positive effect of distributive justice on risk taking diversity indicates that team entrepreneurs will accept calculated risky decisions taken by team members. In addition, the findings of the study revealed that proactiveness diversity do not harness team performance. It is evidently clear that any change in proactiveness diversity had a subsequent negative impact on team performance. The findings buttressed previous scholars evidence that individual differences in proactiveness within a team are expected to reflect discrepancies among team members on task-relevant issues which will negatively affect team functioning (Harrison & Klein, 2007; Kollmann et al., 2017). The findings implied that team performance is negatively influenced as team members exhibit their proactiveness diversity. Lastly, the findings showed that distributive justice mediates the relationship between innovativeness diversity and team performance. The mediation effect means that distributive justice is a key and valued resource to entrepreneurial team diversity and team performance. The findings buttressed the instrumentalist model that employees attach more significance to justice because it gives them control in forecasting and achieving desired economic and material outcomes (Walster et al., 1978).

6 Implications and Conclusion

This study aims at contributing to the existing literature in different ways. The study has contributed to enhancing the understanding of entrepreneurial orientation. Establishing the effects of both proactiveness and innovativeness diversities on team performance have deepen the spectrum of entrepreneurial orientation and have addressed calls made by some scholars such as Wales (2016), Gupta and Gupta (2015), and Miller (2011) to broaden the scope of analysis from the firm level to downstream levels including the individual, top management and entrepreneurial teams. The study therefore, serves as a future research platform with a novel approach making available useful information on the dynamics surrounding individual EO diversity. Therefore, the study theoretically contributes to entrepreneurial orientation.

Secondly, this paper contributes to justice studies by looking at how distributive justice influences entrepreneurial team diversity. The mediation effect of distributive justice on the relationship between risk taking and innovativeness diversities and team performance showed that distributive justice is a valuable resource in boosting entrepreneurial orientation diversities and team performance. This paper offers researchers the opportunity to deepen their understanding in the field of distributive justice and therefore contributes theoretically to distributive justice discourse by highlighting distributive justice as a valuable resource in entrepreneurial orientation and team performance. Thirdly, this paper contributes theoretically to entrepreneurial team research by basically dealing with deep-level diversity in entrepreneurial teams which has received little attention from researchers. This research, therefore addressed the concern made by some researchers such as Klotz and Neubaum (2016) edging future studies in the entrepreneurship domain to pay attention to diversity variables that are more psychologically related, because team members’ homogeneity or heterogeneity with regard to those characteristics affect team functioning and performance. The study particularly expanded the scope of entrepreneurial orientation to include individual dispositions in teams and how that influences team performance.

In terms of practical implication, by establishing the mediation effect of distributive justice on innovativeness diversity, risk taking diversity and team performance, the findings will help entrepreneurs to always consider sharing allotments of any form based on members contribution to the venture so as to build trust among team members perception of fairness. By doing so, it will encourage team members to exploit their innovativeness and risk-taking diversities to enhance team performance. As the findings revealed that proactiveness diversity negatively affects team performance, team entrepreneurs should consider participatory approach in the strategic direction in terms of policies, market opportunities among others in order to control the potential of reducing the rate of recurrence and efficacy of a team’s interactions. The findings implied that entrepreneurs should spend time to understand their team members individual dispositions in terms of risk taking, innovativeness and proactiveness diversities and to encourage members to utilize those that positively affect team performance (innovativeness diversity) whilst discouraging proactiveness diversity.
With regards to limitations, the study was based on a cross sectional views of entrepreneurial team members which could not capture the dynamics of these individual diversities over time. The paper recommends future research to undertake a longitudinal study. The use of self-reported data from entrepreneurial teams could have had impact on the likelihood of bias though the analysis did not reveal any bias which could have seriously affected the findings. The study did not specify the category of teams. The study therefore suggest that future studies should deal with each category of teams because social relations affect the individual diversities and team performance.

Reference


Organizational Behavior and Human Decision Processes, 121(2), 183-193.


