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THE FUNDAMENTAL ROLE OF ABSORPTIVE CAPACITY IN THE OPPORTUNITY EXPLOITATION STAGE, IT’S ANTECEDENCE AND THE EFFECT ON NEW VENTURES PERFORMANCE

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Our study focuses on the opportunity exploitation stage of the entrepreneurial process in new ventures operating in incubators; we propose and demonstrate that Absorptive Capacity (ACAP), the capabilities of the firm to recognize the value of new knowledge coming from external sources, to assimilate it, and to apply it to commercial ends, has a fundamental role in the opportunity-exploitation process. We show that different team characteristics affect the different ACAP stages: new ventures team diversity has a positive effect on ACAP acquisition while goal setting has a positive effect on ACAP exploitation. We propose and demonstrate that ACAP acquisition is positively related to new ventures performance, while the effect of ACAP exploitation on performance is moderated by environmental uncertainty such that in a low uncertainty environment (high certainty) it has a negative effect on performance, whereas in high uncertainty environment ACAP exploitation has a positive effect. Moreover we were able to demonstrate that implementing flexibility strategy has a positive effect on new ventures performance.

The model was tested in Israel on a sample of 56 new ventures in 13 incubators.
Moreover previous research has focused on individual entrepreneurs ignoring the abundance of teams of entrepreneurs. Only recently has the focus shifted to examining founding teams. Still, little is known on the contribution of TMT in the context of entrepreneurial process and the influence on the various ACAP stages. Our study aims at exploring the effect of team diversity on the PACAP process and the effect of goal setting on the RACAP process in new ventures.

Following Choi, & Shepherd 2004, we use incubator companies as a model for studying the exploitation stage. Business incubators are specifically designed for entrepreneurs to explore the potential of their opportunities and move towards full-scale operations (Rice, 2002), and can potentially serve as a model for the opportunity exploitation stage.

The research makes significant theoretical contributions both to the entrepreneurship and ACAP literature. First, we propose and demonstrate that the exploitation stage is an ACAP centered process, whereby new ventures’ team characteristics: functional diversity and goal setting, affect ACAP (Cohen & Levinthal, 1991, Zahra and George, 2002), That together with the strategic actions that are taken to exploit opportunities and gain competitive advantage (Porter, 1980; Shane, 2003), affect new venture performance, while taking into consideration the environmental contingency. Second, we use a multilevel approach (Kozlowski & Klein, 2000; Klein, Tosi, & Cannella, 1999) and demonstrate that factors at the incubator level and at the new venture level affect the new venture's opportunity exploitation. Third, the study examines and demonstrates empirically- the ACAP model that was suggested by Zahra and George (2002), it examines the process antecedents, and is pioneer in examining the moderating effect of the environment on the effect of R-ACAP on performance.

We examined the model on a sample of 56 new ventures in 13 incubators representing the various Israeli incubators. The data includes interviews and questionnaires that were collected from both new ventures and their incubator managers.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Cohen and Levinthal (1990) introduced the term absorptive capacity to express the capabilities of the firm to recognize the value of new knowledge coming from external sources, to assimilate it, and to apply it to commercial ends. In a more recent article, Zahara and George (2002) redefine ACAP as dynamic capabilities represented by a set of organizational routines and processes. They further differentiated between Potential and Realized ACAP. Potential ACAP refers to the firm’s ability to gain and absorb new knowledge while realized capacity refers to the firm ability to exploit that knowledge and gain competitive advantages. Potential ACAP comprises of knowledge acquisition and assimilation capabilities, and Realized ACAP consists of knowledge transformation and exploitation.

Zahra and George (2002) posit that Potential ACAP (PACAP) provides firms with the strategic flexibility and the degrees of freedom to adapt and evolve in high-velocity environments, therefore allowing firms to sustain a competitive advantage even in a dynamic industry context. PACAP captures the firm’s receptivity to new knowledge but does not guarantee its exploitation. Realized ACAP (RACAP) reflects the firm’s capability to leverage the knowledge absorbed using the PACAP processes. To achieve an effective ACAP both PACAP and RACAP have to be present.

The Effect of New Venture Teams Characteristics on ACAP
Previous research has focused on individual entrepreneurs ignoring the abundance of teams of entrepreneurs. 

Entrepreneurial Teams may differ from individuals with respect to two important factors: The team composition in terms of knowledge base, and the team dynamic processes. Research on entrepreneurial teams has focused mainly on how a team of entrepreneurs is formed (Ruef, Aldrich, & Carter, 2003), and on the change in team composition over time (Clarysse & Moray, 2004). Very little is known about the Influence of team composition and team processes on the entrepreneurial process and more specifically on opportunity exploitation.

New Ventures Teams Functional Diversity

ACAP Acquisition refers to the firm’s capability to identify and acquire externally generated knowledge that is critical to its operations. Zahra and George (2002) suggested that knowledge sources and complementary prior knowledge serve as the antecedents to the acquisition process. These knowledge sources can potentially lie within team functional diversity and prior experience. Team composed of diverse members, holding a broad array of expertise, skills, and knowledge, and with different kinds of backgrounds, enables the incorporation of diverse sources of information (Perry-Smith 2006, West, 2002).

Therefore we propose that teams composed of members with diverse background will show higher information gathering from external resources and potential ACAP compared to teams characterized with low diversity.

Hypothesis 1a: New ventures’ team functional diversity is positively associated with Potential-ACAP- (Acquisition and Assimilation)

Goals Setting

The goal-setting theory of motivation proposes that goals are the immediate regulators of behavior and that setting specific and difficult goals leads to higher performance levels than general “do your best”, or easy goals (Erez, M., 2005). The application of goal setting theory to the team level in the last decade confirmed that, similar to the effects at the individual level, group goals have a strong and positive effect on group performance (Latham and Pinder, 2005). A Goal is the aim of an action; it could be proximal, leading to an immediate action, or distal and long term, with interim goals. Goals could be self-set, participatively set, or externally assigned (Erez, 2005). To combine efforts effectively, group members have to understand collectively what they are trying to achieve. Moreover, research showed that involvement in goal setting fosters commitment to goals (Latham & Yukl, 1975; West & Anderson, 1996).

We postulate that teams that specify their learning and work goals will better exploit the knowledge and will demonstrate higher R-ACAP capabilities than other teams Therefore, we hypothesize:

Hypothesis 1b: New ventures’ team Goal Setting is positively associated with Realized ACAP- (Transformation and Exploitation)

The Positive Impact of New Venture's Team Potential ACAP on Performance
Knowledge-based competitive advantage is an area of interest to strategic management scholars and practitioners, who claim that knowledge is the most important source of competitive advantage and sustained above average performance.

Acknowledging their vital link to performance (Brush, Greene & Hart, 2001), entrepreneurship scholars concentrate on particular types of knowledge to understand differential firm performance, especially in terms of the ability to identify entrepreneurial opportunities. Shane and Venkataraman, (2000) and Shane (2000), emphasized the importance of prior knowledge to the entrepreneurial process repetition. Wiklund and Shepherd (2003) focused on knowledge-based resources applicable to the discovery and exploitation of opportunities, relying on RBV theory, they postulate that market and technological knowledge represent important knowledge-based resources applicable to firm's ability to discover and exploit opportunities. We propose that new ventures' teams with well developed potential-ACAP will show better performance. Specifically, we hypothesize:

*Hypothesis 2a: Potential-ACAP is positively associated with new ventures' performance*

The Moderating Role of the Environment

Environmental uncertainty reflects both the rate and unpredictability of change in the industry (Dess and Beard 1984). Previous research has shown that knowledge permits the firm to predict more accurately the nature and commercial potential of changes in the environment and the appropriateness of strategic and tactical actions (Cohen and Levinthal, 1990). Thus, in low uncertainty, stable environments, relevant information should be available for entrepreneurs to be able to estimate the probability of achieving desired outcomes when there is little unpredictable change taking place with respect to their business environment (Hmieleski and Baron, 2008). This is not to say that change does not occur within stable environments, but rather that the nature and rate of change can be reasonably anticipated. When this context is applied to entrepreneurial opportunities, several implications emerge regarding how entrepreneurs should approach the opportunity exploitation process. For example, Alvarez and Barney (2007) suggest that entrepreneurs should follow business strategies that are ‘relatively complete and unchanging.’ and in stable industry environments, entrepreneurs are likely to be most successful when developing and executing detailed, specific plans for opportunity exploitation.

In high uncertainty environments, the probabilities of decision outcomes cannot be estimated, because the necessary information is unknowable in the present. In highly- dynamic industry environments entrepreneurs are not able to estimate the probability of successfully exploiting specific opportunities. When a context of uncertainty is applied to entrepreneurial opportunities, certain implications emerge regarding how entrepreneurs should approach the exploitation process (Hmieleski and Baron, 2008). For example, under conditions of uncertainty, Alvarez and Barney (2007) suggest that entrepreneurs should follow business strategies that are ‘emergent and changing.’ Therefore, in dynamic industry environments, entrepreneurs are likely to be most successful when adjusting their business opportunity to the rapid changes that are taking place in their business environment.

Therefore the ACAP exploitation process outcomes will have a positive effect on performance in environments with high uncertainty, while negative effect in low- uncertainty, and high predictable environments. Specifically, we hypothesize:
Hypothesis 2b: Environmental uncertainty will moderate the relationship between Realized-ACAP and performance such that in high uncertainty environment it will have a positive effect while in low uncertainty it will be negatively related to performance.

The Impact of New Venture's Team ACAP on Strategy

While there are many ways a firm can achieve competitive advantage, two of the most important approaches in dynamic markets are innovation and flexibility strategies (Barney, 1991).

Flexibility and adaptability. Given the uncertainty in terms of market, technology and competition, entrepreneurs need to be flexible and adaptive.

ACAP is a dynamic capability that enables the firm to reconfigure its resources base and adapt to changing market conditions in order to achieve a competitive advantage. Two of the most important strategies to achieve a competitive advantage in dynamic markets are innovation-differentiation and flexibility (Barney 1991, Porter 1980). Zahra and George (2002) proposed that firms with well developed capabilities of knowledge acquisition and assimilation will achieve competitive advantage through the adoption of flexibility and adaptability strategies. P-ACAP plays an important role in renewing a firm’s knowledge base and the skills necessary to compete in changing markets. These firms are more likely to sustain a competitive advantage because of greater flexibility in reconfiguring their resource base. Firms with well developed P-ACAP will likely be more skillful in continuously updating their knowledge stock and by identifying trends in their external environment and internalizing this knowledge. Firms that are flexible in using their resources and capabilities can reconfigure their resource base and capitalize upon emerging strategic opportunities.

Zahra and George (2002), further propose that firms with well developed capabilities of knowledge transformation and exploitation will achieve competitive advantage through the adoption of innovation and differentiation strategies. Transformation and exploitation capabilities are likely to influence firm performance through products and process innovation. R-ACAP through the process of bisociation enables the firm to develop new conceptual schemes or changes in existing processes, exploitation takes it one step further and convert knowledge into new innovative products. Thus, P-ACAP through flexibility and R-ACAP through innovation could lead to and sustain a competitive advantage.

Following Zahra and George (2002), we propose that a new venture's Potential ACAP will be positively associated with flexibility strategy and Realized ACAP will be positively associated with innovation strategies. Putting together the hypotheses on the relationship between ACAP and strategy and ACAP and performance we hypothesize:

Hypothesis 3a: Flexibility strategy mediates the effect of P-ACAP on performance.
Hypothesis 3b: Innovation strategy mediates the R-ACAP by the environment interaction effect on performance.

METHODS

Participants and Data Collection

Data were collected from a sample of 13 technological incubators, out of 26 incubators operating in the National Incubator Program in Israel. Survey data were collected from a sample of CEOs who managed 67 of about 100 new ventures in all 13 incubators.
There were between 2-5 employees in these new ventures. Data was collected through surveys mailed directly to the CEOs following a short telephone introduction to the research. Overall, the total number of effective respondents was 67 (out of a target sample of 100, an overall response rate of 67 %). Of the 67 respondents, 11 were excluded due to missing data. Finally, 56 questionnaires were included in the final sample. The dependent variables of new ventures' performances were collected 6 months on average following the collection of the independent variables.

**MEASURES**

**Independent Variables**

*Absorptive Capacity (ACAP)*. Was measured using a scale developed by Jansen et al. (2005), some of the items were adjusted to fit the context. The scale measures the four absorptive capacity stages suggested, by Zahra and George (2002), using a 7-point Likert type scale

*Organization strategy of innovation. (α = 0.8)*. Was measured by a 3-item scale developed by Baum et al (2001), based on Porter's (1980) generic strategies. Using a 7-point Likert type scale

*Organization strategy of flexibility and adaptability. (α = .74)*. Was measured by a 4 item scale presented in an AOM 2006 working paper, using a 7-point Likert type scale

*Environment.* We used a five-item scale (α = .85), using a 7-point Likert type scale captures environmental uncertainty (dynamism) (Jansen et al.,2005). Some of the items were adjusted to fit the context

*Team diversity. (α = .87)*, Was measured using a five-item measure developed by Campion, Madsker, & Higgs, 1993

*Team goal setting. (α = .86)*, Was measured using a 4 item scale developed by Mathieu et al (2000), using a 7-point Likert-type scale. Unlike other studies measuring team characteristics, that aggregate the scores of group respondents, we mostly had only one informant who answered the questionnaire in each new venture, representing the actual 2 to 5 members in each start-up.

**Dependent Variables**

*Incubator’s management Evaluation (IME).* New ventures in the incubators’ program are being evaluated periodically based on their ability to achieve milestones in development. These milestones are defined for each new venture by the Office of the Chief Scientist examiners as a tool to evaluate the performance of the new venture and by the OCS and the incubator itself. We used this incubator's evaluation tool to assess new venture's performance. IME was measured using a 2 item scale using a 7-point Likert-type scale ranging from 1 “strongly disagree” to 7 “strongly agree”. Items include: ‘the company successfully achieved the milestones as determined by the incubator’, ‘the incubator management is satisfied with the company’s performance’. Respondents were the incubator managers.

*Fund-raising* an objective measure of first round financing (Rothaermel, and Thursby, 2005). Incubator managers were asked whether the new ventures raised money (2) or not (1)

**Control Variables**

In regard to new ventures, we controlled for new venture's CEO prior experience by directly asking if the CEO has (yes) or does not have (no) prior experience in a start up company. We controlled for the type of industry that the company is engaged in, using dummy variables as follows: 1.life science, 2. software, and 3. other industries.
Data Analysis

Our theory and data involved hierarchically nested variables: new ventures are nested in incubators. New venture’s level of analysis that do not control for the nested structure of the data may misrepresent the effects within a given incubator (Klein et al., 1994). Following Bliese (2002), multi-level analyses were conducted using random coefficient modeling also referred to as hierarchical linear modeling, or HLM. Analyses were conducted using PROC-MIXED procedure in SAS. We estimated new venture-level of analysis using mixed regression procedures to test our hypothesis and random-and fixed effects models which provides the correct parameter estimates and significance tests for the nested structure of the new ventures-level in our study (Bliese, 2002, Chen, Bliese and Mathieu, 2005).

We conducted hierarchical moderated mediation regression analyses, following the approach proposed by Judd, Muller & Yzerbyt (2005), and Baron and Kenny’s (1986). Most of our data except for the performance data were self-reported. We used Harman’s Single factor test to preclude the possibility of having only single factor which indicates same method, same source bias (Podsakoff, 2003). The confirmatory factor analysis demonstrated that there was no significant one overall factor on which all items of all measures were loaded ($\chi^2=1460$ df=629, goodness-of-fit index [GFI] = .44, comparative fit index [CFI] = .34, root-mean-square error of approximation [RMSEA]=.15).

RESULTS

Table 1, lists the means, standard deviations and correlations among all the variables in this study. The variables were standardized (grand-mean centered) to reduce multicollinearity (Bryk & Raudenbush, 2002).

Cronbach’s Coefficient Alpha was calculated for all measures. All the measures used in this study had a reliability of 0.70 or higher (the reliabilities are presented on the diagonal and in the Methods section).

Team Characteristics and ACAP

We conducted exploratory (EFA) and confirmatory factor analysis (CFA) of the ACAP questionnaire to test for the four-factor construct independence. The results of both EFA and CFA supported the four-factor model, demonstrating a good fit to the data ($\chi^2=98$ df=79, goodness-of-fit index [GFI] = .85, comparative fit index [CFI] = .94, root-mean-square error of approximation [RMSEA]=.06).

Hypothesis 1a suggested that new venture’s team diversity will be positively related to the two dimensions of potential ACAP – Acquisition and Assimilation. We used mixed regression models procedures (PROC-MIXED procedure in SAS) to test the hypothesis. The results partially supported the hypothesis, demonstrating a significant effect of team diversity on knowledge acquisition ($\beta=0.7$ p<0.001) but not on assimilation. Interestingly we found that ACAP Transformation was also significantly affected by team diversity ($\beta=0.35$ p<0.05).

Hypothesis 1b suggested that new venture’s goal setting will be positively related to the two dimensions of realized ACAP: Transformation and Exploitation. Using mixed regression procedures (PROC-MIXED procedure in SAS), the results supported this hypothesis; demonstrating significant effects of goal-setting on both knowledge transformation ($\beta=0.38$ p<0.05) and exploitation ($\beta=0.74$ p<0.001), ACAP assimilation was also affected by goal setting.
CEO prior experience, that serves as control variable was marginally related to ACAP transformation.

The Effect of ACAP on Strategy

We propose that a new venture's ACAP will be positively related to its strategic actions, Potential ACAP will be positively associated with flexibility strategy and Realized ACAP will be positively associated with innovation strategies. Using mixed regression analysis (PROC-MIXED procedure in SAS), the results demonstrated that acquisition (β=0.2, p<0.05) significantly related to the flexibility strategy, but exploitation (β=0.12 p<0.1) was marginally related to flexibility strategy probably due to the small sample size. The innovation strategy was not related to any of the ACAP factors.

Acquisition was related to the flexibility strategy but not innovation strategy; Assimilation was not significantly related to any of the selected strategies; we hypothesized that both P-ACAP stages will be related to strategy but we were able to support only the ACAP acquisition but not ACAP- assimilation relation. Exploitation was significantly related to the flexibility strategy but not to innovation; transformation was not significantly related to any strategy. Again, we hypothesized that both R-ACAP stages will be related to strategy but were able to support only the ACAP- exploitation but not ACAP- transformation hypothesis.

Since no ACAP factor affected the innovation strategy- we decided not to include it in further analyses. We have got further support for this decision while testing for the effect of innovation strategy on performance, as there was no significant effect of innovation strategy on our two performance measures. Also in the further analysis we will exclude ACAP assimilation and ACAP transformation since no significant relations were found. ACAP acquisition will represent P-ACAP and ACAP exploitation will represent R-ACAP.

The Mediating Effect of ACAP Acquisition on the Relationship between Diversity and Flexibility Strategy

Our model suggests that ACAP acquisition mediated the effect of diversity on flexibility strategy. We tested this hypothesis using Baron and Kenny’s (1986) method, which requires that three conditions be met for mediation to be inferred: (1) the independent variable (X1=diversity) must be significantly related to the dependent variable (Y= flexibility strategy), the independent variables must be significantly related to the proposed mediators (ACAP acquisition), and (3) the previously significant relationship between independent and dependent variables decreases and becomes non significant when the mediator is controlled for. Using mixed regression analysis (PROC-MIXED procedure in SAS), the first step of our analysis estimated the relationship between diversity (X1) and flexibility strategy (Y), this relationship was found to be positive and significant (β=0.4 p<.05). Then, we estimated the indirect effect of diversity on Flexibility strategy and found that in the presence of ACAP acquisition (M) (β=0.35 p<.001), the effect of diversity on flexibility strategy became non significant. These results indicated that ACAP acquisition mediates the effect of diversity on flexibility strategy.

The Mediating Effect of ACAP Exploitation on the Relationship between Goal Setting and Flexibility Strategy

Our model suggests that the ACAP exploitation mediated the effect of goal setting on flexibility strategy. We tested this hypothesis using Baron and Kenny’s (1986) method. The first
step of our analysis estimated the relationship between goal setting (X) and flexibility strategy (Y). Using mixed regression analysis (PROC-MIXED procedure in SAS) this relationship was found to be positive and significant: ($\beta=0.52$, $p<.001$). Then, we estimated the indirect effect of goal setting on Flexibility strategy and found that in the presence of ACAP exploitation (M) ($\beta=0.35$, $p<.05$), the effect of goal setting on flexibility strategy became non-significant. These results indicated that ACAP exploitation mediate the effect of goal setting on flexibility strategy.

**The Effect of ACAP on Performance**

Hypothesis 2 suggested that a new venture's ACAP Acquisition will be positively related to performance both in terms of fund raising and IMV. Using mixed regression analysis (PROC-MIXED procedure in SAS), the results as summarized in Table 2, models 4 and 5, supported Hypothesis 2 for Fund raising ($\beta=0.15$, $p<.001$), and IMV ($\beta=1.74$, $p<.05$).

**The Mediated Moderation Analysis**

We tested the mediated moderation hypothesis using Muller, Judd, & Yzerbyt (2005) method.

**The Moderating Role of the Environment**

Hypothesis 2 stated that a new venture environmental uncertainty, will moderate the effect of ACAP-Exploitation on performance. We Used mixed regression analysis, to test the hypothesis, the results are summarized in Table 2 models 4 and 5: Exploitation was negatively related to IMV when uncertainty was low, negatively related in a more moderate slop in a medium-uncertainty environment and positively related to IMV in high uncertainty environment. Knowledge Exploitation was negatively related to funding when uncertainty was low or medium, but it was not related to funding when uncertainty was high.

**The Effect of Strategy on Performance**

We proposed that a new venture's flexibility and innovation strategies will positively affect its performance. Using a mixed regression analysis (PROC-MIXED procedure in SAS), the results as indicated in Table 7 provides support to hypothesis 2 both with respect to IMV ($\beta=0.36$, $p<.01$) and to Fund raising ($\beta=1.36$, $p<.1$): implementing the flexibility strategy had a positive effect on new ventures' performance both in terms of first round financing and IMV.

**The Mediating Effect of the Flexibility Strategy on the Relationship between the ACAP by Environment Interaction and Performance**

Hypothesis 3 suggested that the flexibility strategy mediated the effect of ACAP on performance, and mediated the interaction effect of ACAP –Exploitation by the environment on Performances. We tested this hypothesis using Judd, Muller & Yzerbyt (2005) method The first step of our analysis estimated the relationship between ACAP acquisition (X or the treatment effect) and performance (Y- the outcome), this relationship was found to be positive and significant as shown in Table 2, Models 5a and 6a: Fund raising ($\beta=0.15$, $p<.001$), and IMV ($\beta=1.74$, $p<.05$). Then, we estimated the indirect effect of ACAP acquisition and exploitation on IMV and Fund raising and found that in the presence of flexibility strategy (ME), the effect of ACAP acquisition and the effect of the interaction of ACAP exploitation with the environment (MO) on performance did not significantly decrease for both IMV and Fund raising. The effect of flexibility strategy remained positive and significant for IMV ($\beta=0.36$, $p<.01$) and marginally significant for
Fund raising ($\beta=1.36 \ p<.1$). These results indicated that flexibility strategy did not mediate the effect of ACAP acquisition on performance and the interaction effect of ACAP - exploitation with the environment on Performance. Thus, hypothesis 3 was not supported as both factors influenced firm's performance.

The Incubator Effect

We also tested for the incubator effect on new ventures' performance using multilevel analysis (t-Tests of Covariance Parameters based on the restricted likelihood), and demonstrated that there is a positive effect on first round financing (Chi Square=3.02* Pr > ChiSq=0.04) while no effect on Incubator management evaluation (Chi Square=0.74 Pr > ChiSq=0.2), simply belonging to a certain incubator could increase or decrease the chances for first round financing.

DISCUSSION AND CONCLUSIONS

This study contributes to both ACAP and the Entrepreneurship literature in several ways. First it successfully validated the proposed model of the ACAP-centered opportunity exploitation process. While previous research has been devoted mostly to the decision of exploitation we demonstrate that this stage itself is a process whereby Absorptive Capacity plays a fundamental role. Second, we provide empirical support to Zahra and George (2002)'s model, demonstrating the significant effect of ACAP on new ventures’ performance outcomes. Third, our study expanded the Zahra and George's model by showing that the R-ACAP effect on performance is moderated by the level of environmental uncertainty. Forth, this study identified the factors influencing ACAP and shows that different team characteristics affect the different stages of ACAP: team diversity positively influenced knowledge acquisition, while team goal setting positively influenced knowledge exploitation. Fifth this study demonstrates that while ACAP affect flexibility strategy and while flexibility strategy affects performance, flexibility strategy does not mediate the effect of ACAP on performance.

This study expands Zahra and George’s (2002), theoretical model and is pioneer in examining and demonstrating the moderating effect of the environment on the effect of ACAP- exploitation on performance. This finding is in alignment with Alvarez and Barney (2007)'s propositions that under conditions of uncertainty, entrepreneurs are likely to be most successful when adjusting their business opportunity to the rapid changes that are taking place in their business environment. Yet, in more stable industry environments to be successful, entrepreneurs should follow business strategies that are ‘relatively unchanging.’ The effect of ACAP acquisition is not moderated by the environment, probably because the processes itself captures the effect of the environment: it involves a continuous search and absorption of knowledge from the external environment and utilization of this knowledge.

We contribute to the ACAP literature by identifying the differential effect of team characteristics on the knowledge acquisition versus knowledge exploitation phases. Zahra and George (2002) suggested that knowledge sources and complementary prior knowledge serve as the antecedents to P-ACAP and especially to the acquisition process. We demonstrated that these knowledge sources can potentially lie within team functional diversity and prior experience. Team composed of diverse members, holding a broad array of expertise, skills, and knowledge, and with different kinds of backgrounds, enables the incorporation of diverse sources of information (Perry-Smith 2006).
We demonstrated that goal setting positively affected ACAP exploitation. This finding is in support of the goal setting theory, demonstrating that group goals have a strong and positive effect on group performance (Latham and Pinder, 2005).

These findings advance knowledge on both Absorptive capacity and entrepreneurship demonstrating the antecedents to ACAP and the importance of team processes to the entrepreneurship process. We explored the team processes affecting the various stages of ACAP, and more interestingly, we showed that different team processes have varying importance in affecting the different stages of ACAP. Team functional diversity positively affected ACAP acquisition, while goal setting positively affected ACAP exploitation. The present study contributes to the understanding as to why certain companies are able to acquire new external knowledge, but are not able to exploit it successfully. These results also reveal that new ventures may differ in their ability to manage levels of potential and realized absorptive capacity, and they differ in their ability to create value from their potential absorptive capacity due to the lack of team goal setting processes.

This study is the first to empirically test Zahra and George’s (2002) theory which proposed that firms with well developed capabilities of knowledge acquisition will adopt flexibility strategy. In contrast to our expectations, we found that ACAP exploitation is also positively associated with flexibility strategy, exploitation reflects a firm’s ability to harvest and incorporate knowledge into its operations resulting in new innovative products and processes (Zahra and George, 2002), and flexibility strategy can enhance this capability. This may in particular be relevant to new ventures, which are still in the process of shaping their position in the market.

We advance research on incubators in using multilevel analysis that takes into consideration both incubator's and new ventures' level of analysis. The model takes into consideration the hierarchically nested structure where new ventures are nested in incubators. All the effects that were tested are over and above the incubator effect. The significant incubator effect suggests that simply belonging to a certain incubator could increase or decrease the chances for first round financing. Unfortunately we did not hypothesis or test for the factor at the incubator level that affects fund raising, and hence left it open for further research.

Limitations and Directions for Future Research

Several limitations of our study may offer additional research opportunities. First we had only one respondent from each new venture- the companies' CEOs. We found that most of the new ventures operating in incubators employ 2-5 team members of them only 1-2 are the companies' employees. Hence, the CEO responded to the questions pertaining to the team, rather than the team members' responses. Since these are very small companies it is reasonable to assume that the CEO is close to the team and functions as the team leader, hence, he has a first hand knowledge of the team processes and activities.

In addition, most of our data except for the performance data was self-reported. We used Harman’s single- factor test to preclude the possibility of having only a single factor which indicates same method, same source bias (Podsakoff , 2003). The confirmatory factor analysis demonstrated that there was no significant one overall factor on which all items of all measures were loaded. Furthermore, the confirmatory factor analysis of ACAP yielded four independent factors, again precluding the risk of same –source same method bias.
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### Table 2: Results of Moderated-Mediation Analyses

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$^1$P<0.10; *p<0.05; **p<0.01; ***p<0.001

$^1$A multilevel analysis: t Tests of Covariance Parameters based on the restricted likelihood

---

Chi Square=0.74