

Light Bulb Moments: Where Do Student Entrepreneurs Get Their Ideas

Journal of Marketing Education
2023, Vol. 45(3) 268–277
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DOI: 10.1177/02734753231166710
journals.sagepub.com/home/jmd



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Abstract

Understanding how to support creative ideation is an important, yet, elusive, issue for marketing educators. To shed light, this study proposes ideation as a malleable state influenced by “outside-the-brain” resources. By examining venture concept ideation, this study captures the ideation–environment relationship using experience sampling to tap into the daily lives of student entrepreneurs. The findings identify how entrepreneurial ideas emerge from specific external interactions and engagements, which are contextualized using two Japanese conceptualizations of space, *ba* (場) and *ma* (間). The results inform both marketing education and entrepreneurial marketing.

Keywords

ideation, environment, student entrepreneurs, experience sampling, marketing education, situated cognition

Although entrepreneurial marketing has been defined as a mind-set, orientation, and process that proactively and passionately exploits opportunities (e.g., Alqahtani & Uslay, 2020; Hills & Hultman, 2011), our understanding of where entrepreneurial opportunities come from is incomplete, as the tendency of opportunity research is to examine entrepreneur traits, rather than the interactions and engagements from which opportunity emerges and evolves (Shepherd, 2015). To address this gap, our research examines the influence of external factors on idea generation among nascent entrepreneurs. By studying student entrepreneurs participating in a campus hatchery program, ideation is viewed as a malleable state influenced by “outside-the-brain” resources; that is, interactions with others, formal and liminal spaces, and materials to think with (Clark & Chalmers, 1998). Prior studies examining workplace creativity or innovation describe the influence of internal factors, such as mood, job stress and recovery (Binnewies & Wörnlein, 2011; Bledow et al., 2013; Weinberger et al., 2018) or formal, coworking spaces, such as incubators, accelerators and makerspaces (Aslam et al., 2021; Bouncken & Aslam, 2019; Pittaway et al., 2019). This study takes a more expansive view to examine the influence of specific external interactions and engagements—unbound by classroom—on venture idea generation among nascent entrepreneurs with results informing both marketing education and entrepreneurial marketing.

The ability to create—connect elements and form novel combinations—is considered a higher level learning outcome and an important educational outcome (Krathwohl, 2002). Within the marketing education literature, student creativity is recognized as a cornerstone of business (McCorkle et al., 2007) and an important learning outcome

(Jaskari, 2013) that should be distributed throughout the marketing curriculum (Ramocki, 1994). As Titus (2007) notes, businesses are clamoring for creative breakthroughs. In support of pedagogy, marketing scholars have responded by addressing creativity’s impact on course experience (Krishen, 2022), development through course design (Blijlevens, 2023; Rohm et al., 2021; Titus, 2000), and assessment in furtherance of learning outcomes (Jaskari, 2013). Much like opportunity research, this approach to understanding and supporting creativity would benefit from examination of individual interactions and engagements to understand creativity’s context. Although marketing educators have made significant advances developing and accessing creative ideation skills in the classroom, the student experience extends beyond the classroom which may very well be where creative insights emerge (Feriady et al., 2021).

Student entrepreneurs are confronted with many of the same challenges as entrepreneurial marketers. Among these challenges are severe resource constraints, imperfect information, competing personal and business goals, and a scarcity of time and talent: (Hills et al., 2008). To support student entrepreneurs, research within the education literature has advanced knowledge on the content and method of teaching entrepreneurship; however, understanding of place and the where-how of entrepreneurial pedagogy remains inadequate (Christensen et al., 2023). Although entrepreneurs often

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operate in established ecosystems of resource endowments and institutional arrangements (Stam & van de Ven, 2021), student entrepreneurs rely on university mechanisms to support startup success. Like general entrepreneurial ecosystems, these university-based systems include formal and informal resources and arrangements like curriculum, competitions, funding opportunities, supportive individuals and spaces, and institutional and regional factors (Wright et al., 2017). Evidence suggests that these programs support student skill development and startup performance (Eesley & Lee, 2021).

By examining the direct experiences of student entrepreneurs, this study offers three primary contributions. First, this research builds understanding of ideation–environment linkages by tapping into daily lives of student entrepreneurs in both formal and informal settings. Second, the study informs understanding on how entrepreneurial opportunities emerge, not from singular flashes of insights as sole productions of the entrepreneur’s mind, but rather originating through external interactions and engagements. Third, the findings provide insights for marketing educators into how student entrepreneurs develop new ideas, how they deepen their understanding of venture opportunity, and what environments (people, programs, and places) support entrepreneurial ideation.

The paper is organized as follows. First, a description of opportunity emergence, as an embodiment of knowledge creation between entrepreneur and environment, is introduced. To examine the ideation–environment relationship, a conceptual framework is presented to hypothesize how entrepreneurial ideas emerge from specific external interactions and engagements. Next, the methodology describes the use of experience sampling to directly tap into entrepreneurial ideation, and a linear mixed model empirically tests the hypotheses. The paper concludes with a discussion of the results and implications to both theory and practice.

Conceptual Framework

Opportunity’s precursor is new venture ideation (Kier & McMullen, 2018); and one of the most important abilities of the successful entrepreneur is opportunity identification (Ardichvili et al., 2003), which is inherently a creative process (Hansen et al., 2011; Hills et al., 1999). Although much of entrepreneurial education focuses on how to exploit a known opportunity, there are effective teaching practices—such as short creativity exercises—that support individual ability to identify new business opportunities (DeTienne & Chandler, 2004; Karimi et al., 2016). With idea generation serving as the basis for creativity, Smith (1998) analyzes 172 techniques to classify methods into (a) strategies that directly promote ideation, (b) techniques that support creative stimulation, and (c) enablers that provide conditions amenable to ideation.

Supporting evidence on the effectiveness of creativity training (i.e., course content and delivery) indicates that ideation techniques are most potent (Scott et al., 2004). And yet, while creativity may be taught (Amabile, 1988), we have yet to unlock the possibilities of context—rooted in social, physical, and material interactions—in creativity research (Glăveanu, 2013), workplace creativity (Zhou & Hoever, 2014) and entrepreneurship (Dew et al., 2015). To address situated entrepreneurial cognition, this study examines entrepreneurial opportunities as an embodiment of knowledge creation between entrepreneur and environment.

Entrepreneurial opportunities begin as ideas, which are continuously developed and shaped through interplay between entrepreneur and environments (Dimov, 2007a, 2011); Rather than a complete flash of insight, the venture idea is refined to become more useful and viable to the entrepreneur through external interactions and engagements, as the venture develops from idea (incomplete mental representation) to concept (simplified business model) to opportunity (exploitable venture) (Vogel, 2017). This opportunity emergence is explained by situated entrepreneurial cognition (Dew et al., 2015) and grounded in the extended mind thesis, which supposes an active role of the environment in shaping cognition (Clark & Chalmers, 1998). Rather than insight residing solely in the head, the entrepreneur actively externalizes thinking. Removing the external would significantly change creative ideation and development of entrepreneurial opportunity. As such, the venture idea is an artifact of the entrepreneur’s dynamic, iterative interactions and engagements with environments; that is, entrepreneurial cognition inseparably linked with others, with materials, with spaces.

In examining opportunity emergence for the situated entrepreneur, this study isolates the venture idea set (Hill & Birkinshaw, 2010) that comprises the venture concept, which is defined as an emergent form of venture opportunity representing a stock of entrepreneurial ideas about customers and venture (Abell, 1980; Ladd, 2018). Specifically, venture concept represents a set of ideas relating to customer segment (who is being satisfied?), customer need (what is being satisfied?), customer solution (how customer needs are satisfied?), and venture resources (what the business needs?). Business model development is an outcome of creative ideation based on the interplay between entrepreneur’s context and cognition (Roessler et al., 2022).

With venture concept as an outcome variable, the study examines the influence of external context on the embedded, nascent entrepreneur over a period of time. To describe the contextual situation wherein student entrepreneurs ideate, the study draws upon a philosophical perspective relying on two Japanese concepts of space and space use: *ba* (場) and *ma* (間). Rather than residing solely within individuals, insights emerge in situations favorable to *ba* and *ma*. *Ba* describes how aspects of space interrelate to help create experiences or foster new ideas (Nonaka & Konno, 1998). In

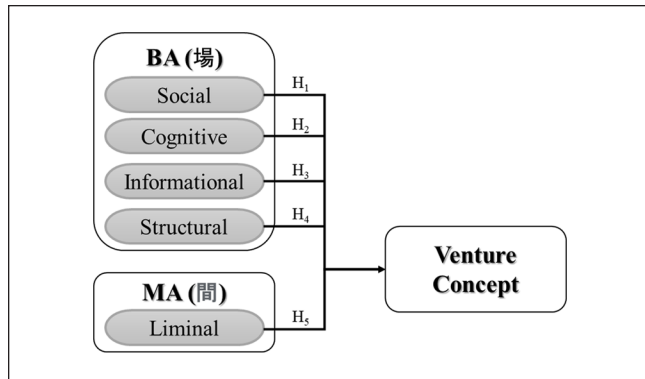


Figure 1. Conceptual Model and Hypotheses.

this way, *ba* is a knowledge creation platform whereby insights emerge because of enabling conditions; whereas, *ma* describes liminal space that allows for insight based on separation and detachment; that is, reflecting or thinking in natural environments (Kodama, 2017).

Within entrepreneurial marketing education, the application of *ba* and *ma* is observed in how students interact with others, with arrangements, and with materials, but also in how students detach from situations of active engagement. Beyond physical contours, *ba* permeates a range of student interactions that harbor insight including social, cognitive, informational, and structural arrangements that create connections which promote new knowledge (Choo & Alvarenga Neto, 2010). Although *ba* functions as shared space for knowledge creation and use, *ma* describes both spatial and temporal gaps or openings that are reflective, restorative and distractive. From a marketing education perspective, *ma* acknowledges the student experience beyond deliberate interaction with others, existing knowledge, and directive spaces, which further builds on prior studies of student time use and learning outcomes (Nonis et al., 2006).

To inform theory and design, this study examines opportunity emergence (conceptualized as venture concept) as an outcome of the student entrepreneur's external interactions and engagements (conceptualized as *ba* and *ma*). The conceptual domain and operational items for venture concept, *ba* and *ma* are summarized in Table 1.

Understanding outside-the-brain ideation demands cataloging the interactions and engagements that promote opportunity emergence. As Dew and colleagues (2015) observe, there is a heightened need to inventory examples of situated entrepreneurial cognition and assess these in natural settings of entrepreneurial activities. To address this need, the conceptual domain and operational items are based on extant literature. Venture concept items, as identified by Abell (1980) and validated by Ladd (2018), describe essential issues that founders focus on when creating a nascent startup.

To catalog the enabling context, *ba* dimensions describe social, cognitive, informational, and structural interactions

and engagements and are based on a literature synthesis by Choo and Alvarenga Neto (2010), while *ma* describes the intervals between these interactions and engagements and is informed by growing research examining moments of detachment and recovery (Wach et al., 2021; Weinberger et al., 2018; Williamson et al., 2019). In operationalizing *ba* and *ma*, item generation was directed by conceptual domain and applicability to interactions and engagement within the student's entrepreneurial ecosystem. The relationships of *ba* and *ma* with venture concept ideation are illustrated in the conceptual model (Figure 1) followed by a description of each hypothesis. As students move in and out of various environments, they encounter and use these spaces to further their idea development toward a working venture concept.

Social contexts represent convergent interactions with venture team members, potential customers, and mentors (entrepreneur/professor) that are focused on finding a well-defined solution to a problem. Social relationships allow for the sharing of tacit knowledge among individuals through close proximity whether these be physical, virtual, mental or any combination thereof (Nonaka & Konno, 1998). These interactions are based on norms and values (Choo & Alvarenga Neto, 2010) and focus on problem-solving. Through socialization, individuals are able to make sense of situation and apply this understanding to a course of action, thus producing convergent insight (Dimov, 2007b). For student entrepreneurs, socialization among team, users and mentors will generate venture ideas.

Hypothesis 1 (H1): Social context is positively related to venture concept ideation.

Cognitive context represents divergent interactions with peer startups, existing ventures, and curricular/cocurricular experiences (e.g., lecture/seminar, student club, etc.) that are once removed and less focused on solution-finding. As Choo and Alvarenga Neto (2010) suggest, novel insight is further enabled by the integration of diverse knowledge. The proximity of peer startups enables knowledge spillovers by allowing for the integration of external, diverse knowledge (Roche et al., 2022). Looking to outside models that are separate from specific problem at hand encourages new connections and novel solutions, thus producing divergent insight (Dimov, 2007b). For student entrepreneurs, interactions with divergent, yet similar, sources like peer startups, prior success/failure cases, and curricular/cocurricular experiences will generate venture ideas.

Hypothesis 2 (H2): Cognitive context is positively related to venture concept ideation.

Entrepreneurs rely on information search; the degree and type of which may vary based on experience and familiarity (Cooper et al., 1995). Informational context represents

purposeful research with codified, stored knowledge including online search, database resources, and popular, trade, and press reports. The use of information technology and systems serves as an enabling condition for knowledge insight (Choo & Alvarenga Neto, 2010). Not all valuable information is tacit in nature. Systematic search of current events, business filings, patent databases, and similar information sources connect the entrepreneur to existing knowledge. For student entrepreneurs, use of codified, explicit knowledge will generate venture ideas.

Hypothesis 3 (H3): Informational context is positively related to venture concept ideation.

Built environments for entrepreneurs provide resources for different aspects of new venture development from ideation to materialization to full integration (Pittaway et al., 2019) and more broadly to include search, selection, support, and performance of new ventures (Hausberg & Korreck, 2020). Structural context represents built environments that provide a degree of structure and direction to knowledge creation activities and include hatchery, hothouse, workshops, and events. As formal places to interact and engage, these spaces provide location to enable ideation from inspiration to evaluation. For student entrepreneurs, being in formal entrepreneurial environments will generate venture ideas.

Hypothesis 4 (H4): Structural context is positively related to venture concept ideation.

Finally, liminal context represents spaces in between—an interval in time and place (Isozaki, 1979)—to include being alone, at rest, or in recreational spaces. Liminal space allows an individual to disengage from the problem at hand and return with new perspective—to combine discontinuities and synthesize contradictions that arise in daily life (Kodama, 2017). As Weinberger and colleagues (2018) demonstrate, physical and mental recovery results in a boost in an entrepreneur's creativity, while sleep quality boosts innovative behavior (Williamson et al., 2019). Cognitive and emotional detachment during non-work has also been demonstrated to result in higher employee creativity (Niks et al., 2017). For student entrepreneurs, a spatial/temporal pause in problem-solving unlocks ideas.

Hypothesis 5 (H5): Liminal context is positively related to venture concept ideation.

Method

To examine the role of environment (*ba* and *ma*) on venture concept ideation, experience sampling was used wherein participants report thoughts, feelings, and behaviors across a range of times and situations (Uy et al., 2010). Study participants were involved in a campus incubator program

(unaffiliated with a particular course or major) at a west coast university, which has launched over 120 companies and raised >US\$250 million in capital. The incubator program engages students across campus through mentorship, workshops, location, and other resources. At the time, students were preparing for a pitch competition, which provided an appropriate population and natural setting for this study.

Twenty-one students agreed to participate during a 3-week period prior to the competition. On seven occasions, participants were prompted by notification email directing them to an online survey instrument, which contained questions about the day's business ideas and the settings where these ideas occurred. The first five questions asked about the content of venture ideas ("Today, I have created new ideas about . . .") and the remaining 21 questions assessed the possible role of *ba* and *ma* items ("Today's idea(s) was influenced by . . ."). Respondents assessed each item on a 0 to 100 sliding scale (Not at all—To a great extent). An increase (decrease) for any item indicated an increase (decrease) for the construct. Non-respondents were sent two additional reminders for each notification, and participants were offered a US\$5 coffee gift card for each week of participation. Respondents predominately identified as male (85%) from different disciplines (e.g., business, engineering, agriculture, architecture, and liberal arts). Data collection resulted in 96 response-level (Level 1) observations, which included venture ideas and *ba/ma* elements, and 21 person-level (Level 2) observations.

Based on the review of literature, measures were developed to capture the conceptual domain and maintain content validity. In generating measurement items, the goal was both representativeness (facets of the construct) and face validity (relevancy to respondents) (Netemeyer et al., 2003). Prior research has used participant-rated idea generation as a measure of creativity (Weinberger et al., 2018) and innovative work behavior (Janssen, 2000), which this study adapts to include the idea set comprising the venture concept for nascent startups (Ladd, 2018; Vogel, 2017). Similarly, developing measures for *ba* and *ma* required extensive literature review and deliberation among the research team to achieve both representative and valid items. For both venture concept and *ba/ma*, an "other" option was also provided to assess untapped items. For venture concept, there were eight responses to "other" option with five relating to how to present the product to investors/customers and three relating to how to reach customer. For context-stimulating ideation, the open-ended option resulted in 12 responses, which were consistent with existing *ba/ma* dimensions; that is, talking with professor, talking with friend, working with team, listening to entrepreneur; free time, surfing, taking out trash, etc. Table 2 presents the descriptive statistics and correlation coefficients for the study measures.

To test the effects of *ba* and *ma* on venture concept, a linear mixed model was estimated using SPSS (Garson, 2013). This generated a two-level hierarchical model nesting

Table 1. Measures: Conceptual Domain and Operational Items.

Measure	Conceptual domain	Operational items
Venture concept	Ideas relating to customer and venture	Who my customer is? What my customer needs? Ways to satisfy my customer? What my business needs?
Social	Interpersonal and interactive relationships	A professor An experienced entrepreneur A potential user/customer A member of your team
Cognitive	Diverse and integrative knowledge	Student club meeting or similar event A lecture/seminar Another venture/business A peer (not team member)
Informational	Codified and stored knowledge	News report(s) Database research Article(s) Online search
Structural	Formal and directive spaces	Hothouse space CIE (trade) event Startup workshop Hatchery space
Liminal	Reflective, restorative, and distractive spaces	Walking Working out or other recreation Quietly sitting/resting Being alone

time within individuals. With multiple observations per subject, a repeated measures design was used with a first-order autoregressive covariance matrix to account for the serial correlation among the repeated measures. Comparative models (null, mixed with random effects, and autoregressive repeated measures) were estimated to assess model performance and fit.

Results

Results from three estimated models (Table 3) indicate that the best fitting model is the autoregressive repeated measures model based on difference test of log likelihood, Akaike's information criteria, and Bayesian information criterion. Significant effects are indicated for social, structural, and liminal elements, offering support for H1, H4, and H5.

By examining idea generation among nascent entrepreneurs in their daily lives in formal and liminal settings using experience sampling methodology, this research builds on prior studies that have examined the influence of internal states and workplace environments on creativity and knowledge creation. Results suggest an important role for both *ba* and *ma* spatial elements. The social context (H1) result suggests that interpersonal relationships among venture team, potential customers, and experienced mentors (entrepreneurs/professors) are influential in idea generation, while the structural context (H4)

result highlights the importance of physical spaces—like hatcheries, workshops, and incubators—in providing locations for accessing organized information and engagements. Finally, liminal context (H5)—representing reflective, restorative, and distractive breaks—provides moments for inspiration. Although support is not evident for cognitive (H2) or informational (H3) contexts, the significant bivariate correlations shared with structural context (see Table 2) suggest a co-locational relationship among these *ba* elements. The findings should inform both theory and practice and be of value to entrepreneurial marketing educators interested in how venture ideas emerge outside the entrepreneurial brain and the role of entrepreneurial creativity spaces as students interact and engage in various environments.

Discussion

This research represents a new line of research. Although there are studies that address how the physical environment assists or hinders entrepreneurial pursuits (e.g., Al-Dajani et al., 2014) and that examine the role of incubators and accelerators in venture development and performance (e.g., Hausberg & Korreck, 2020), a literature review, across disciplines, yields limited theoretical or empirical research on the role of shared space on new venture ideation. By examining ideation (i.e., venture concept development) in the daily lives

Table 2. Measures: Descriptive Statistics and Correlation Coefficients.

Measure	M	SD	1	2	3	4	5
1 Venture concept	40.29	23.09	1.00				
2 Social	17.32	17.49	0.37**	1.00			
3 Cognitive	18.95	16.34	0.15	0.22	1.00		
4 Informational	11.31	15.68	0.26*	0.21	-0.05	1.00	
5 Structural	10.60	14.34	0.40**	0.35**	0.25*	0.40**	1.00
6 Liminal	24.34	19.68	0.26*	0.05	-0.07	0.19	0.18

Note. SD = standard deviation.

* $p < .05$. ** $p < .01$.

Table 3. Model Estimates.

	Null	Mixed	Autoregressive
Intercept	41.53 (9.90)**	19.39 (3.21)**	23.18 (3.51)**
Social	—	0.57 (3.50)**	0.52 (4.29)**
Cognitive	—	-0.05 (-.25)	-0.27 (-1.69)
Informational	—	0.17 (0.84)	-0.04 (-0.26)
Structural	—	0.28 (0.98)	0.44 (2.20)*
Liminal	—	0.34 (2.33)*	0.38 (3.32)**
-2 log likelihood	475.78	461.78	450.60
Δ -2 log likelihood	—	14.00	25.18
Δ degrees of freedom	—	6	5
AIC	481.78	479.78	466.60
BIC	487.69	497.51	482.36

Note. AIC = Akaike's information criterion; BIC = Bayesian information criterion; t-values in parentheses.

* $p < .05$. ** $p < .01$.

of student entrepreneurs, this research builds on prior studies that have examined the influence of internal states on creativity and of workplace environments on knowledge creation to offer an understanding of ideation-environment linkages. The findings inform both theory and practice on the emergence of entrepreneurial ideas (representing the venture concept), not as a singular flash of insight, but rather as shaped by external context on the embedded, student entrepreneur over a period of time. On a practical level, this study adds to understanding how student entrepreneurs develop and deepen insights and how educators can better support creative ideation.

The study findings suggest how entrepreneurial ideas emerge outside the entrepreneurial brain and the important role for both *ba* and *ma* elements. The social context result indicates that interpersonal relationships among venture team, potential users/customers, and experienced mentors are influential in idea generation. The structural context result highlights the importance of physical spaces—like hatcheries, workshops, and incubators—in providing locations for accessing organized information and engagements. Finally, liminal context—representing restorative, reflective, and distractive breaks—like solitude, resting, meditating, or exercising—allow for moments of inspiration.

Creativity is a skill that can be nurtured. However, creativity cannot simply be taught in one class, but rather is best experienced repeatedly throughout the curriculum with different classes and different experiences that allow students to learn the process and the effect of different environments. Just as allowing time for team, mentor, and faculty interactions as part of existing assignments enables *ba* to flourish in the classroom, quiet, reflective time with students working alone allows for *ma* to be present in the learning experience. These diverse experiences directly bolster student creativity, allowing individuals and teams to think creatively within a safe and supportive framework. Beyond instructing students to be creative, professors need to create a favorable environment and build systems to guide students to use the environment to improve their creative process. Learners can be creative with scaffolding and support.

One recommendation in applying this study's findings to the classroom and other entrepreneurial spaces is to examine the marketing curriculum holistically to seek out places where creativity and idea development are part of class assignments. Integration of teaching creative processes should be distributed throughout the span of classes, from beginning to end, including introductory and capstone courses. The marketing education literature continues to offer a range of methods to introduce and support creativity

allowing professors to choose the one which fits their style and course outcomes (e.g., Blijlevens, 2023; Krishen, 2022).

Opportunity identification is essential to entrepreneurship and entrepreneurial education. In further supporting ideation, a professor should consider specific environments that assist students in developing their creativity. This helps students understand both the creative process and the environments that help shape creativity. By surfacing the process, stating why students are working alone, with peers, or with mentors, students are guided to discover how each environment assists them in their ideation. Students can then incorporate these best practices for ideating, develop an understanding that creativity is a process, and that process is helped by certain contexts. This integration of environmental awareness into the learner's creative process will help them to understand its importance and applications.

Theoretical Implications

There are numerous directions for future researchers to explore that both address limitations and expand theory development. Although this study applies Japanese philosophical understandings to space, alternative theoretical lenses might offer a competing explanation of ideation–environment linkages. The operationalization of *ba* and *ma* based on a student entrepreneurial ecosystem may suffer from narrowness or omission; that is, virtual space. A more robust measurement program offers an opportunity to confirm and expand the conceptual domain by broadly examining the natural settings of student entrepreneurs to identify relationships, artifacts, and tools that underlie situated cognition (Dew et al., 2015). Building on this study's findings, future researchers should advance theory on “entrepreneurial creativity spaces” that is aligned with entrepreneurial marketing and marketing education.

To test robustness and expand implications, additional avenues of research are available to examine a broader set of entrepreneurs, experiences, and implications. The small sample size and over-representation of male-identifying students suggest that future research validates the generalizability of findings in different contexts and institutions. Although this study does not examine gender, women are under-represented in entrepreneurship programs with even fewer participating in competitions suggesting the need to apply a gendered and intersectional lens to better understand student interactions and engagements (Cochran, 2019). Future research might also include additional contextual factors (e.g., venture type/phase, team composition, the applications of methodologies like lean startup) and performance implications (e.g., measurement of performance in terms of creativity, funding success, and product-market fit). The use of experience sampling offers many fruitful directions to explore longitudinal relationships and the development of ideas into opportunity.

In regard to marketing education, theoretical implications focus on creativity and further understanding of *ba* and *ma* elements. Addressing Ramocki's (1994) call to teach creativity throughout the marketing curriculum requires that educators develop a better understanding of classroom/curricular design and importantly student experience outside the classroom on learning. For educators, there are several theoretical implications in applying *ba* and *ma* to entrepreneurial marketing and entrepreneurial creativity spaces. Within social spaces, interpersonal interactions allow open dialogue for students to experiment with and develop ideas with others (Lee & Choi, 2003). Cognitive context, as an enabling condition, promotes creative ideation by exposing students to a variety of different perspectives from a broader community (Peltokorpi et al., 2007). Knowledge creation is also enabled by connection to existing (codified and retrievable) knowledge, which supports insight through an informational context wherein explicit knowledge interacts with student action and experience (Nonaka & Konno, 1998). Structural elements are enabling contexts that support student knowledge creation through the purposeful configuration and arrangement of enabling conditions (Choo & Alvarenga Neto, 2010). As this study demonstrates, liminal space is a powerful source of creative ideation. Educators need to be intentional in considering the efficacy of temporal and spatial detachment as a learning tool.

Creative ideation is not constrained to classroom instruction. Ideas emerge from student experiences with a variety of others, materials, and places. In appreciating the situated cognition and natural contexts of students, marketing education theory needs to address not only classroom and curriculum but also contexts, especially the myriad of social and structural spaces both within and beyond the classroom. Although marketing educators appreciate the value of reflection in learning (Catterall et al., 2002; Peltier et al., 2005), educators must also extend this line of thought to develop a richer understanding of liminal contexts (i.e., restoration and distraction) that influence student creativity.

Pedagogical Implications

On a practical level, this study provides a view into how student entrepreneurs develop insights, how understanding of venture opportunity deepens, and what people, programs, and places support them. Although creativity's importance to business is well recognized, the results of this study inform how we nurture creativity in marketing education. During their creative process, students need space to interact, to engage, and to detach. To not just get ideas, but to develop them and make them actionable. To support the *ba*, students need time to share and talk about their ideas with one or more of their team members and others to help them with creative problem-solving. Formal spaces allow for interaction with peers, mentors, and faculty and engage with information,

technology, and materials that support both convergent and divergent thinking. Idea quality and quantity are more effective when individuals are also allowed space to work independently (Girotra et al., 2010). Importantly, students also need reflective and restorative time to develop their ideas—to allow for *ma* space.

As marketing educators, our thinking on creativity may need revision, as a trait to be nurtured through purpose and design. Just as workplace creativity is contingent on supportive contexts for both creative and noncreative employees (Zhou & Hoever, 2014), classroom and curriculum provide the conditions for creative potential. In designing space for creativity, marketing colleagues might ask themselves: How does your classroom environment support creativity? How is creativity interwoven into marketing curriculum? Furthermore, how do marketing educators design *ba* into classroom and content through social, structural, informational, and cognitive elements to enable more in- and out-of-class activities that develop student's skills in creative thinking and the creative problem-solving process. In addition to formal spaces for interactions and engagements, classroom and curriculum redesign should include consideration of restorative, reflective, and possibly distractive time that allow space for insights to emerge. At a higher level, educators need to rethink experience outside the class, as light bulb moments are not constrained to classrooms (or laboratories) but rather extend to the interactions and engagements that students carry with them in everyday experience.

For structured *ba* spaces, there are two ways in which formal spaces (accelerators, incubators, startup weekends, hackathons, and makerspaces) can potentially encourage creativity. The first is to have programming which teaches participants about the creative ideation process, including how the environment and particular spaces help the creative process. Second is to actually create, either permanent or temporary, spaces for interactions and engagement during startup development, and include mentors and experts in socializing. Programming including ideation process and best practices, along with socialization, helps entrepreneurs ideate. In addition to socializing, design elements might also encourage experiences in liminal spaces for reflection, restoration, and distraction that allow place and time for creative insights to light up.

Conclusion

Opportunity identification is a creative process essential to entrepreneurial success. In examining the possibilities of context to unlock venture concept ideation, this study examines entrepreneurial opportunities as an embodiment of knowledge creation based on interactions and engagements between entrepreneur and environment. The findings provide for an initial foray in the study of situated cognition for entrepreneurial marketing and marketing education and suggest future research on the daily lives and natural settings of

nascent entrepreneurs that advance theory on ideation–environment linkages. If educators and students are made aware of the need for supportive and varied environments to help develop entrepreneurial ideas, educators are more likely to leverage entrepreneurial creativity spaces and students are more likely to proactively place themselves in these environments, thus enabling creative ideation as an important learning outcome and industry need.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

Authors would like to acknowledge funding support from Cal Poly Research, Scholarly, and Creative Activities Grant Program (RSCA 2018).

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