

Can entrepreneur demographics moderate the effect of improvisational capabilities on organizational resilience? Evidence from selected MSMEs in Barangay Caticlan, Aklan Province

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Abstract

Extant literature hints that improvisation can now go beyond the jazz metaphor and be scaled for use in an organizational setting. To test this, we investigated the moderating effect of selected entrepreneur demographics on the hypothesized improvisation-resilience nexus. We polled 103 entrepreneurs, and then invited several expert respondents to corroborate the survey findings. Linear regression analysis subsequently revealed that improvisation is a highly significant predictor of organizational resilience. Selected entrepreneur demographics such as age, educational attainment, years of business experience, form of business ownership, type of business operations, and firm size were all shown by moderated regression to amplify the effect of improvisation on resilience. Key recommendations included the need to fortify small business resilience (a) by designing a resource plan for crisis threshold, (b) through the use of collective improvisation, and (c) by having a combination of different income sources within and across customer groups.

Key Words: improvisational capabilities; organizational resilience; entrepreneur demographics; crisis management

Introduction

Unexpected events and sudden changes shouldn't catch anyone by surprise in this hyper-connected world we live in today. News, information, and real-time updates on virtually anything an entrepreneur needs to efficiently operate a business are readily available at lightning speed. And yet, supply chains are easily obstructed because business owners underestimate the wrath of a typhoon, terrorist attacks cripple financial markets, and cybercrimes immobilize global databases in the blink of an eye (Linnenluecke, 2017). Many business owners are left wondering then if there was anything they could have done to prepare for such external disruptions. The full impact of either a natural or a man-made crisis is often only grasped in hindsight but a more proactive approach involving resilience building needs to be learned so that potential damage to life, property, investment, and livelihood can be mitigated (Tibay, Miller, Chang-Richards, Egbelakin, Seville, Wilkinson, 2017). In the face of these realities, fortifying the resilience of business

establishments has now become a strategic imperative. And nowhere was this task more formidable than in the tourist gateway town of Barangay Caticlan where many business owners once hastily prepared for the return of their transiting customers after an unexpected lull in tourist arrivals.

Research Questions and Objectives

For our study, we posed the following questions:

1. Is the organizational resilience of selected micro, small, and medium enterprises in Barangay Caticlan, Aklan Province significantly affected by their level of improvisational capability?
2. Using the indicators of organizational resilience developed by Orchiston, Prayag, & Brown (2016) as well as by Lee, Vargo, & Seville (2013), what is the level of organizational resilience manifested by the entrepreneurs appraised in terms of (a) their propensity to prepare for and respond to emergent issues (planning and culture), and (b) their ability work collectively with other entities especially in a crisis (collaboration and innovation)?
2. Following the dimensions of organizational improvisation proposed by Hmieleski and Corbett (2006), what is the level of improvisation demonstrated by the entrepreneurs measured in terms of their (a) creativity and adeptness at bricolage, (b) ability to function under stress and pressure, and (c) level of spontaneity and persistence?
3. Can an entrepreneur's age, educational attainment, years of business experience, type of business ownership, type of business operations and firm size amplify or diminish the impact of improvisational capability on organizational resilience?

By addressing these research questions, we were able to make a small contribution to the developing literature on using improvisation as a tool for strengthening small business resilience seen from the lens of nascent entrepreneurs who cannot afford to lose their scarce resources in a crisis. Furthermore, few empirical studies have so far been conducted on determining the role played by demographics in altering the dynamic between improvisation and resilience. At best, evidence provided by extant literature is anecdotal (Theil, 2007; Rogers, 2014; Conforto, Rebentisch, and Amaral, 2016; Hadida and Tarvainen, 2014) By using entrepreneur demographics as moderators in this empirical study, we moved a step closer in understanding the role of an entrepreneur's age, educational attainment, years of business experience, type of business ownership, type of business operations, and firm size in altering the effect of improvisational capabilities on small business resilience.

Literature Review

Apart from a few anecdotal and empirical evidences provided by Rerup (2001), Best and Gooderham (2015), Frykmer, Uhr, and Tehler (2018) and Mendonca and Friedrich (2006), studies to validate the improvisation-resilience nexus for business establishments is still a developing area of interest. The relative dearth of empirical investigations on the use of business improvisation as a tool in fostering organizational resilience prompted us to treat it as a broad construct that can be applied across many situations and not just in the context of crisis management. This perspective

allowed us to cast a wider net during their literature review and in the process found the study of Hmieleski and Corbett (2006) which revealed that proclivity for improvisation added significant explanatory value to the entrepreneurial intentions of the research subjects. Figure 1 below depicts the framework upon which improvisational capability was assessed in their study.

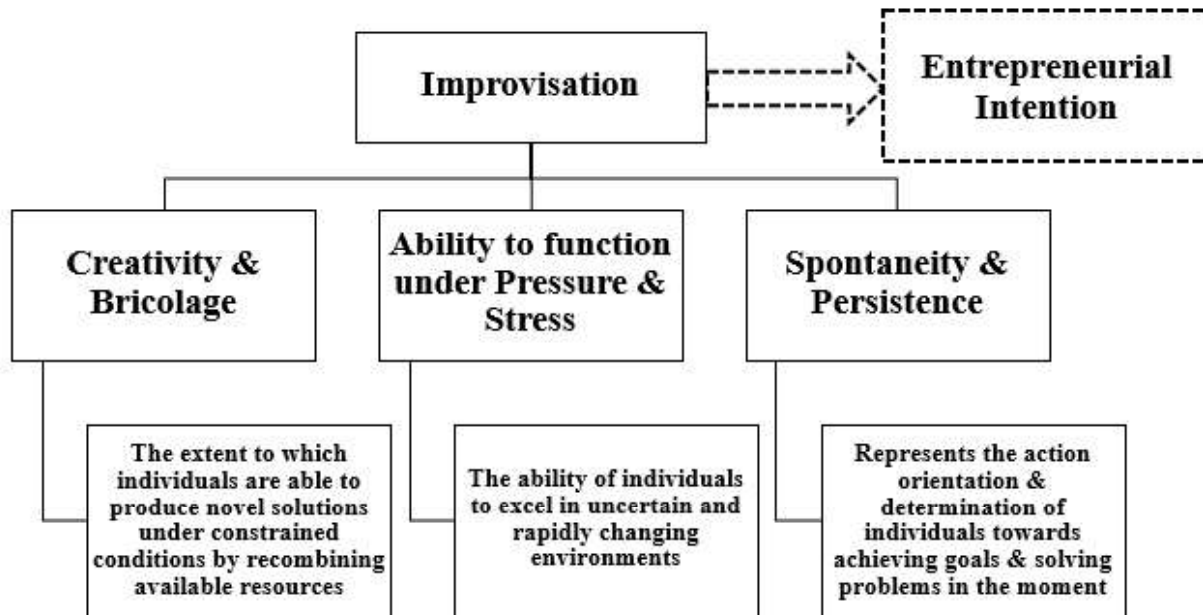


Figure 1. A derivation of the theoretical framework to assess *proclivity for improvisation* as a predictor of *entrepreneurial intention* (adapted from Hmieleski & Corbett, 2006)

Following the previous works of Tierney, Farmer, and Graen (1999), Vera (2002), Unger and Kernan (1983), as well as of Moorman and Miner (1998), Hmieleski and Corbett (2006) argue that improvisation is reflected through one's creativity, functional ability, and spontaneity during moments of uncertainty where very little time for analysis or reflection is possible. Improvisation is thus regarded as a way of using the limited information or resources one has in times of urgent need when standard protocols do not appear practical or even doable during an unexpected event.

On the other hand, we wanted to know the probable effect of entrepreneurial characteristics on small business owners' likelihood to improvise largely influenced the selection of demographics as a moderating variable. Anecdotal evidence was again provided by Theil (2017) when he suggested that older, seasoned entrepreneurs tend to be more creative and spontaneous. However, a contrary opinion was expressed by GolinHarris CEO Fred Cook since he believes that younger, inexperienced entrepreneurs tend to improvise more (Rogers, 2014). An experiment on improvisation conducted by Conforto, Rebentisch, and Amaral (2016) seems to concur with the opinion of Cook as it revealed that individuals who do not possess significant prior experience or technical knowledge were more likely to improvise than those who were more experienced. Since creativity and spontaneity are critical building blocks of improvisational capability (Hmieleski and Corbett, 2006; Leybourne & Kennedy, 2015), these differences in opinion merit further exploration. Meanwhile, Hadida and Tarvainen (2014) alluded that organizational configurations like firm size and even form of ownership perhaps can affect improvisational capabilities since

“three individuals improvising together, with 100 friends, or with 100 co-workers” can have different outcomes.

Rounding off the theoretical frameworks for this investigation is the work of Orchiston, Prayag, and Brown (2016). The team appears to have closely followed an initial study conducted by Lee, Vargo, and Seville (2013) and thereafter derived a functional model that can approximate the capability of a system to survive, adapt, and even renew itself after man-made or natural disturbances. Further adding to the appeal of this framework is its suitability for use in tourism-oriented locales like Barangay Caticlan. Figure 2 is an extrapolation of the model which the team proposed in their study:



Figure 2. Theoretical model to assess *organizational resilience* in the tourism sector (adapted from Orchiston, Prayag, & Brown, 2016 as well as Lee, Vargo, & Seville, 2013)

Operational Framework

The most detailed representation of all constructs used in this study can be appreciated through its operational framework. Specific measures under which the variables were assessed are shown in the diagram that follows. These measures are consistent with those mentioned in the discourse of Hmieleski and Corbett (2006), Orchiston, Prayag, and Brown (2016), Lee, Vargo, and Seville (2013), Theil (2017), Ropers (2014), Conforto, Rebentisch, and Amaral (2016), as well as by Hadida and Tarvainen (2014).

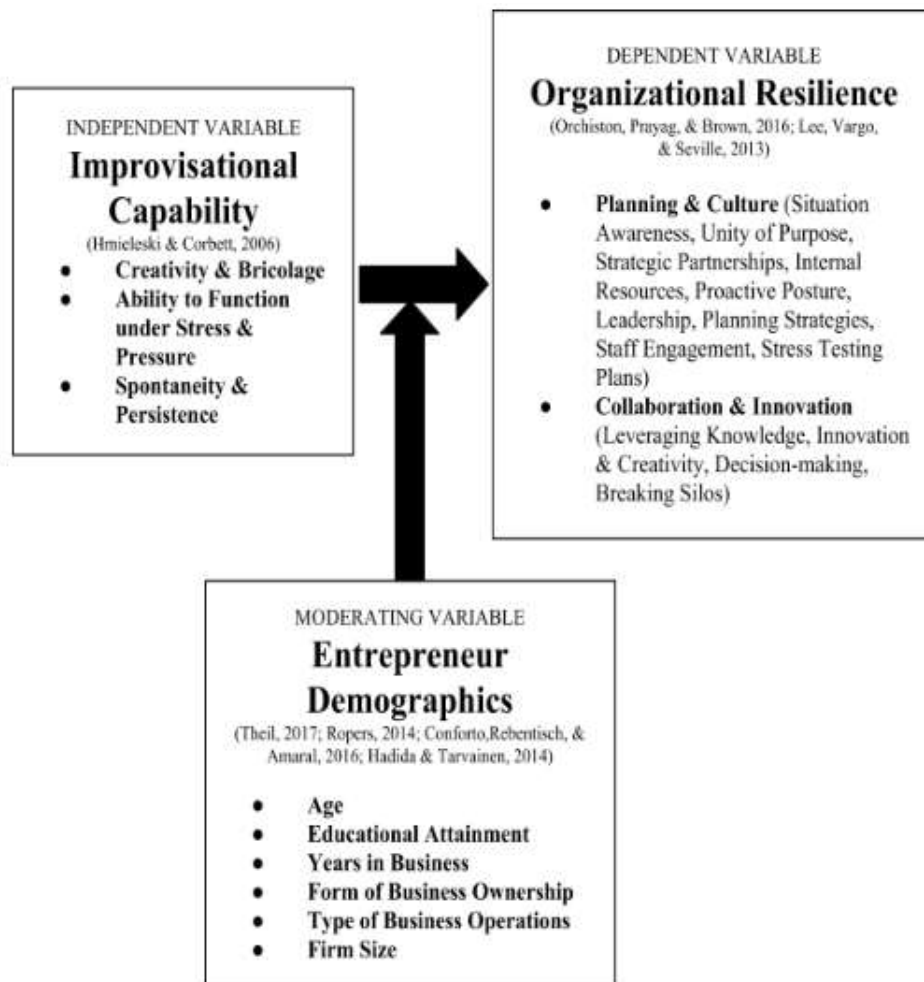


Figure 3. Operational framework to measure the moderating effect of Entrepreneur Demographics on the hypothesized link between Improvisational Capability and Organizational Resilience

Hypotheses of the Study

The group proposed 8 hypothesis statements which they postulated as probable answers to the research problems. **H₁** and **H₂** were formed based on anecdotal evidence provided by Rerup (2001), Best and Gooderham (2015), Frykmer, Uhr, and Tehler (2018) as well as Mendonca and Friedrich (2006) all of whom suggested that the propensity of individuals within a system to

improvise influences the way they prepare for, adapt to, and possibly weather a disturbance or unexpected event. Scoping studies of extant literature conducted by Van de Walle (2014) as well as by Grøtan, Størseth, Rø, and Skjerve (2008) also served as a basis for the first 2 pairs of hypothesis since “over-proceduralized” and “over-organized” establishments leave little room for concrete solutions to emerge especially during a crisis situation. Apparently, only by demonstrating creative, flexible behavior in response to an unexpected event can the chances of survival, recovery, and even renewal increase for a business entity which undergoes a setback.

H₁: *There is a significant relationship between improvisational capability and organizational resilience.*

H₂: *Improvisational capability has a significant effect on organizational resilience.*

Similarly, the lack of scientific investigations which study the effect of entrepreneur demographics on improvisational capabilities has once again led the team to form the remaining 6 hypothesis statement based on anecdotal evidence provided by Theil (2017), Rogers (2014), Conforto, Rebentisch, & Amaral (2016) as well as by Hadida and Tarvainen, (2014). All of them suggested that the ability of entrepreneurs to improvise may either be enhanced or diminished by certain quantifiable characteristics which they possess.

H₃: *The entrepreneur's age accounts for variances in the way improvisational capability affects organizational resilience.*

H₄: *Number of years in business accounts for variances in the way improvisational capability affects organizational resilience.*

H₅: *Type of business ownership accounts for variances in the way improvisational capability affects organizational resilience.*

H₆: *Type of business operation accounts for variances in the way improvisational capability affects organizational resilience.*

H₇: *Firm size accounts for variances in the way improvisational capability affects organizational resilience.*

H₈: *Educational attainment of the owners accounts for variances in the way improvisational capability affects organizational resilience.*

Research Design

This study follows a descriptive-causal and multi-stage mixed methods research design. A descriptive-causal research was conducted to illustrate patterns or characteristics of variables in particular instances, as well as to ascertain the occurrence of, or change in improvisational capabilities leading to shifts in organizational resilience. A mixed-method research was also conducted to collect, analyze, and integrate both quantitative and qualitative data. Quantitative and qualitative data were collected both concurrently and sequentially which makes the research *quasi*-multi-stage mixed methods in design.

Concurrent with the survey conducted were the series of interviews held with local government officials based in Malay Municipality, Aklan Province. Afterwards, survey results obtained and analyzed were then reported to the lead expert so that his comments can be sent in the form of written narratives.

Research Locale

This study was conducted at Barangay Caticlan in Malay municipality, Aklan province. This locale was regarded by the researchers as a critical case for this particular topic since it is a tourist gateway which faced a man-made crisis when neighboring Boracay Island was closed by the national government from April to October 2018. Barangay Caticlan's popularity as the preferred gateway to Boracay resulted in the construction of an airport that has direct flights to and from Manila. It also has two jetty ports where many boats that ferry tourists to Boracay Island are docked.

Profile of Respondents

The primary respondents for this research were the MSME owners whose establishments are located in Barangay Caticlan, Aklan Province. When this study was conducted, there were 354 registered MSMEs in Caticlan as enumerated in a list given to the team by an official representative working at the Malay Municipal Hall. The list contained the business name and addresses of all commercial establishments in Barangay Caticlan. A sample size of 188 entrepreneurs was then computed using Slovin's formula with an error margin of 0.05. In order to randomize the selection of respondents, the team converted the list into an Excel dataset and random samples were thereafter generated by the spreadsheet.

Expert sampling was used, meanwhile, in identifying those who will cross-validate survey results through their high degree of knowledge on either the research locale or the subject matter. Written narratives were obtained from the study's lead expert Dr. Ignatius P. Cahyanto and his insights were used to further extract meaning from the survey results. Dr. Ignatius Cahyanto is a prolific scholar in crisis management and a tenured professor of Hospitality Management at the University of Louisiana located in Lafayette City, Louisiana, U.S.A. He has written and published many scholarly articles on crisis management and the one which he co-authored with Dr. Lori Pennington-Gray of the University of Florida served as the team's inspiration for conducting this study.

Along with Dr. Cahyanto, the group also interviewed Mr. Frolibar S. Bautista. When this study was being conducted, Mr. Bautista was a member of the Sangguniang Bayan of Malay and was a former Vice-Mayor of Malay. The group was also fortunate to have been given the chance to interview the Municipal Mayor of Malay at the time, Mayor Ceciron S. Cawaling. Both provided a local's and a politician's perspective on how the businesses in Caticlan fared when Boracay was temporarily closed.

We likewise had the chance to confer with Caticlan barangay captain Mr. Ralf Tolosa, Mr. Mark Ronald D. Aloba who is the head of Barangay Caticlan's Disaster Risk Reduction Team, and Mrs. Zanita Gabito who is the head of the Caticlan-Boracay Transport Multi-Purpose Cooperative (CBTMPC).

Method of Data Collection

Both quantitative and qualitative data were gathered for this study in observance of the protocol required by a mixed-methods research design.

A total of 188 owners of MSMEs in Barangay Caticlan were randomly chosen to answer a short survey which contained factors and items adapted from the studies of several scholars. The important parts of the instrument are described in detail below:

1. Respondents were initially asked for the following demographic information about themselves and the establishments they own: *age, educational attainment, years of experience as entrepreneur, form of business ownership, type of business operations, and firm size.*
2. **Section 1** of the questionnaire contained 26 items which were grouped according to the 3 dimensions that measure the improvisational capability construct: *creativity and bricolage, ability to function under stress and pressure, as well as spontaneity and persistence.* All items and dimensions in this section were adapted from Hmielecki and Corbett (2006) who studied the proclivity for improvisation of their research subjects so that its effects on entrepreneurial intention can be determined. For this study, a 5-point Likert scale was used to indicate the extent of agreement or disagreement by the respondent for each item.
3. **Section 2** of the primary research instrument contained 13 items clustered around the 2 dimensions that appraise the level of organizational resilience of establishments owned by the respondents. All items and dimensions to measure the construct were adapted from Orchiston, Prayag, & Brown (2016) who closely followed the earlier study conducted by Lee, Vargo, & Seville (2013).
4. A reliability test of the modified research instrument generated a Cronbach's alpha coefficient of 0.83 for items measuring improvisational capability, 0.87 for items appraising organizational resilience, and 0.88 for the overall reliability of the primary research instrument.

Additionally, the group invited experts who shared their insights on the constructs under study. For this reason, an interview guide was designed by the team so that their conversation with the experts can be structured and meaningful.

Method/s of Data Analysis

After quantitative data was encoded, descriptive statistics was used to present data in a meaningful way so that initial patterns regarding the responses are established. To know if a relationship exists between the levels of improvisational capability and organizational resilience, the team used Pearson Product Moment Correlation Coefficient r . To confirm if improvisational capability influences organizational resilience, the inferential statistical tool of simple linear regression was utilized. And to test the moderating effect of entrepreneur demographics on improvisational capability as it influences organizational resilience, the team performed moderated regression analysis. Lastly, transcripts of interviews conducted were subjected to thorough content analysis so that the researchers can truly appreciate the roles played by entrepreneur demographics

and improvisational capability in building organizational resilience from the perspective of experts invited.

Highlights of Research Results

Our team flew to Aklan Province and embedded themselves in Barangay Caticlan to collect data from 2 to 8 September 2018. A total of 188 questionnaires were distributed to entrepreneurs who owned establishments in the research locale and out of those which were deployed, 103 were returned. Upon inspection of the retrieved survey forms, all were found to be usable for the study. The proportion of questionnaires retrieved represents 55% of the actual number of survey forms deployed by the researchers during the course of their data collection. The team's retrieval rate appears to be higher than the 36.1% norm suggested in the seminal work of Baruch (1999) and also higher than the 35.7% response rate suggested years later by Baruch and Holtom (2008). These percentages were suggested in order to benchmark response rates for organizational-level research where the respondent is an executive/owner of an establishment.

Profile of Respondents

The typical entrepreneur who participated in the study (a) is a college graduate, (b) has around five years or less of business experience, (c) is the sole owner of his/her business, (d) owns a firm engaged in merchandising or retail, (e) is approximately 38 years of age, and (f) has an average of five employees working for him/her.

On the Levels of Improvisational Capabilities and Organizational Resilience

Survey responses were by and large clustered around the mean and this subsequently led the entrepreneurs who participated in the survey to rate their overall improvisational capabilities as *above average* ($\bar{x} = 3.74$). These results appear to confirm the findings of a study by Best and Gooderham (2015) where it was revealed that entrepreneurs were natural improvisers and that they considered it normal to improvise especially when faced with adversity as it profoundly affected their chances of survival. A strong tendency to engage in improvisational behavior was also recorded among the entrepreneurs studied by Hmieleski, Corbett, and Baron (2013). It was unclear, however, if their subjects improvised as an intentional strategy or as a reaction to a crisis.

Business owners who were polled believe that their establishment's level of resilience is currently *above average* ($\bar{x} = 3.79$). The consolidated responses appear to be similar to those who participated in tourism-centric studies conducted by Orchiston, Prayag, and Brown (2016) in Canterbury, New Zealand, Sheppard and Williams (2016) in Whistler, Vancouver, British Columbia, and by Ruiz-Ballesteros (2011) in Agua Blanca, Ecuador. In all of these studies, resilience was demonstrated because the respondents were situationally-aware, were receptive to change and uncertainty, created opportunities for self-organization, and were willing collaborators with other groups whom they may have to work with during moments of adversity.

Additionally, the team observed that small business resilience may be partially due to the nature of businesses owned and the type of customers served by the entrepreneurs. Because most business establishments in Caticlan served the needs of local residents, they really did not have to

rely on transiting tourists for sales. Except for a number of businesses engaged exclusively in tourism-related services like tour operators, inns, dive shops, and boat (*banca*) rentals, many establishments can indeed generate revenue from Caticlan residents alone. Similar observations were made by Dahles and Susilowati (2015) in the Indonesian neighborhoods of Sosrowijayan and Prawirotaman who attributed the resilience shown by small businesses to their “flexible specialization, diversification, and a combination of different sources of income within and across sectors.” Indeed, the decision of local entrepreneurs to engage in businesses that cater to both locals and tourists allowed them expand or diversify during boom times and to downsize in a crisis. Tourism, therefore, was not their single source of income and this perhaps saved them from having to completely cease operations when Boracay was closed.

On the Effect of Improvisational Capabilities to Organizational Resilience

Table 1
Summary of simple regression results

Model	<i>B</i>	Multiple <i>R</i>	<i>p</i>	Adjusted <i>R</i> ²
Constant	0.901	-	< 0.001	
Improvisational Capabilities	0.770	0.698	< 0.001	0.482

The regression output shown in Table 1 provides conclusive evidence that there is a significant association between changes in the improvisational capability of the respondents and shifts in their organizational resilience (Multiple *R* = 0.69, *p* < 0.001). In fact, nearly half of changes (*Adj. R*² = 0.482) in organizational resilience can be explained by the entrepreneurs’ improvisational capabilities. This outcome necessitates the rejection of both **H₁** and **H₂** which ultimately means that for Caticlan-based entrepreneurs, their adeptness at performing extemporaneous actions and making impromptu decisions enhances their firm’s ability to prepare for as well as survive an unexpected event. These results confirm anecdotal evidences provided by Rerup (2001), Best and Gooderham (2015), Frykmer, Uhr, and Tehler (2018) as well as by Mendonca and Friedrich (2006) all of whom believe that improvisation plays a role in fostering organizational resilience. They are also consistent with Van de Walle (2014) as well as Grøtan, Størseth, Rø, and Skjerve (2008) when their scoping studies of extant literature revealed that “over-proceduralized” and “over-organized” establishments leave little room for concrete solutions to emerge especially during a crisis situation. Both theoretical and observed patterns likewise appear to match in this case, with only *Sangguniang Bayan* representative Mr. Floribar Bautista expressing some reservations regarding the role of improvisation in fostering resilience among small businesses in Caticlan. Lead expert respondent Dr. Ignatius Cahyanto of the University of Louisiana at Lafayette meanwhile reinforced the role of improvisation in advancing resilience by citing crisis management studies conducted by Bessant, Rush, and Trifilova (2015), Paraskevas, Altinay, McLean, and Cooper (2013) as well as by Parnell (2015).

In his seminal essay on the topic, Weick (1998) argues that improvisers will have “high confidence in skill to deal with non-routine events” and will also find it easier to work with “ongoing developments and restructuring” as a result of their readiness to abandon routines and do without plans. We echo this sentiment, believing that the proclivity to think out-of-the-box

both in good times and bad can expand an entrepreneur's repertoire of possible actions if an unusual event comes along. While we acknowledge that organizational resilience can also be attained by reducing uncertainties and vulnerabilities through formal planning, following standard operating procedures alone in an unprecedented event can also be disastrous (Van de Walle, 2014). Perhaps the self-reported improvisational proclivities of the survey respondents should be utilized in enhancing their firms' resilience across both dimensions of this study's adapted framework.

On the Moderating Effect of Selected Entrepreneur Demographics

Table 2
Summary of moderated regression results

Moderator	<i>B</i>	<i>p</i>	Adjusted <i>R</i> ²
Age	0.136	< 0.001	0.490
Educational attainment	0.079	< 0.001	0.483
Years of business experience	0.166	< 0.001	0.509
Form of business ownership	0.186	< 0.001	0.506
Type of business operations	0.177	< 0.001	0.525
Firm size	0.130	< 0.001	0.485

It can be seen from Table 2 that the interaction of all six demographic factors contributed significantly to the hypothesized improvisation-resilience linkage. From the perspective of entrepreneurs in Barangay Caticlan therefore, the effect of improvisation on resilience is strengthened when entrepreneurs are *older* (Theil, 2017; Rogers, 2014), are *more educated* (Adams, 2005), have *more years of business experience* (Augier & Vendelo, 1999; Weick, 2005; Walle, 2014; Hmieleski and Corbett, 2008), *co-own the business with others* (Gerber, 2009), own a business engaged either in *service* (John, Grove, and Fisk, 2006; Solomon, 2016) or *manufacturing* (Bhadouriya and Baghel, 2014) and have *more employees* working for them (Hadida and Tarvainen, 2014).

Providing further validation to the survey results were the insights of all expert respondents as well as *a priori* knowledge on the significant role of educational attainment, years of business experience, form of business ownership, type/nature of operations, and firm size in shaping the improvisation-resilience nexus. However, we are cautious in generalizing about the effect of age as a moderator since there appears to be some differences between the emergent theoretical and observed patterns. More studies need to be conducted in order to fortify the role of age as a potent moderator in this case.

The results of the moderated regression analysis performed support all remaining hypothesis statements from **H₃** to **H₈**.

Conclusions

As the study was completed, it became apparent to us that all research questions were addressed and all objectives attained. The six demographic moderators used in the study were revealed to significantly moderate the effect of improvisation on resilience. There is a strong,

positive ($R = 0.698$) and significant ($p < 0.001$) relationship between the improvisational capability demonstrated by the respondents and the organizational resilience manifested by the firms they own. Moreover, survey results show that the effect of improvisation on resilience is highly significant ($p < 0.001$) and sizeable ($AdjR^2 = 0.482$). Both theoretical and observed patterns matched, thus galvanizing the role of improvisation in fostering resilience among small businesses in Caticlan.

Key Recommendations

Guided by the results of this study, we make the following key recommendations:

Recognize improvisation as a legitimate response strategy especially during adversity. At a crucial time when planned action is not possible, adapting and surviving an unexpected event may depend on one's ability to harness intuition and creativity in using available resources (i.e. human, financial, physical, and technological) for purposes other than their intended original use (Baker, 2007; Fisher, 2012). This will serve as a buffer for small business owners who may have very few resources at their disposal especially in times of adversity.

The entrepreneur's proclivity for improvisation must also consider the context upon which it is used. Cunha et al. (2014) suggests a variety of improvisational techniques which require different levels of creativity and spontaneity in response to divergent organizational problems. They also recommend adjusting the degree of improvisation depending on whether a particular organizational structure is more hierarchical or devolved. It can be assumed that firms with devolved structures are more open to collectively improvising as a team compared to those with more rigid hierarchies.

Results of this study reveal that the efficacy of improvisation is enhanced if done collectively. We recommend that both the owner/s and the employees collectively improvise as a response to a contingent situation so that their responses are more coordinated and coherent (Adrot and Garreau, 2009). This concerted effort to rise above a crisis through thoughtful experimentation can only happen if co-owners as well as employees are informed about the potential gains and setbacks of improvisation so that they can gain confidence in responding creatively and decisively in situations where pre-designed procedures are not an option in the interim.

Improvisational skills can be calibrated more accurately if the improviser is also aware of the potential dangers brought about by being overly non-conformist or intuitive (Giustiniano, Cunha, and Clegg, 2016; Amorim and Pereira, 2015). In this regard, the business owner must be cognizant of the limits under which improvisation may be used so that all who are empowered to do so in a crisis situation do not breach improvisation's tolerance levels.

Developing a resource plan for crisis threshold is another key recommendation. Crisis threshold refers to levels at which an organization can remain operational as it deals with an evolving situation. Intense crises like natural calamities, terrorist attacks, and data breaches may require the business owner to quickly access scarce resources in order to stay open for as long as they can. Events that take a longer time to brew such as an economic crisis, socio-political upheavals, or a looming problem with a supplier may give firm owners some time to device an

appropriate response strategy. Developing a thoughtful resource and action plan which addresses as many contingent events as possible will aid in determining resource requirements, resource availability, and the best response for specific situations so that the firm can remain open despite a crisis. It is also critical to highlight the degree under which plans and procedures can be adjusted (or improvised) by the players in a crisis so that responses are appropriately calibrated in real time as a crisis unfolds.

Build a strong foundation based on adaptive resilience before advancing to more crisis-specific strategies in overcoming difficulties. Adaptive resilience is all about cultivating best practices on what an organization does and how its members think across any turbulent setting (Walker, et al. 2015). Resilience becomes adaptive when the mindsets of players are matched with coping strategies and situational responses that cuts *across various types of crisis* (Walker, et al., 2014). Entrepreneurs are thus enjoined to fortify the adaptive resilience of their firms (a) by becoming careful planners, thoughtful task delegators, and improvisation advocates, (b) by building trust and teamwork among all organizational members whose collaborative skills are critical in times of distress, (c) by believing in the power of continuous learning so that agility in understanding a crisis and in formulating calibrated responses is developed, (d) by recognizing that employees are an entrepreneur's closest allies in planning for, responding to, and recovering from an unplanned event, and (e) by always working closely with external entities (i.e. local government units, NGOs, neighborhood associations) with whom the firm may have to collaborate with in times of adversity.

Small business owners can enhance their adaptive resilience by *combining different sources of income within and across sectors* (Dahles and Susilowati, 2015) or *even customer groups*. This will allow the firm owners to expand operations (by hiring more seasonal workers or stocking on additional inventory) during the peak tourist season and to downsize when only the local residents remain as their core customers.

Finally, the LGUs in Barangay Caticlan can *spearhead a campaign designed to upgrade their gateway town into an actual tourist destination* instead. The unspoiled beaches dotting the coastline of Barangay Caticlan as well as the lush foliage found in neighboring towns can be unique ecotourism destinations unto themselves. Doing this will allow them to have a more reliable and stable source of customers that can rival (if not surpass) their more popular neighbor.

Limitations of Research Findings

Similar to other research undertakings, the findings of this study certainly has limitations. First, the generalizability of the survey results cannot be proven since the number of respondents fell short of the expected number. Even if the actual number of respondents who provided useable data was higher than the norm described by Baruch (1999) as well as by Baruch and Holtom (2008), this issue remains to be a proverbial thorn on the team's side. Future researchers are advised to obtain useable responses following the computed sample size (if not more) so that results can truly represent the population under study. Second, the researchers' limited knowledge in multivariate statistics precluded them from conducting a confirmatory factor analysis in order to know if dimensions under each variable are accurately measured by the items listed. Although the instruments were adapted from previous studies and are presumed to have been vetted quite well by other researchers, conducting another confirmatory factor analysis might reveal new typologies which could be a significant step towards indigenizing the instruments for use in the Philippine setting. Third, the level of resilience measured is presumed to be general and not crisis-specific. At most, it describes the ability of respondents to bounce back in an economic crisis since that was the prevailing condition in Barangay Caticlan when the study was conducted. Future researchers are enjoined to enrich the literature on the subject by focusing on crisis-specific resilience measures instead.

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