administrative sciences

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The Impact of Formality, Integration, and Commitment on the Performance of Latino-Owned Small Businesses

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Abstract: Supporting the growth of minority-owned small- and medium-sized enterprises (SMEs) is an important goal in many countries. In the US, Latinos start businesses faster than any other demographic group, yet Latino wealth and income have not kept pace with the broader society. In this study, we explore the impact of different business and owner characteristics on the performance of Latino-owned small businesses. Using a survey of over 200 Latino small business owners in Silicon Valley, we apply ordered logistic regression to measure the effect of several variables on firm revenue. Our findings suggest that in addition to the gender and education of the owner, the most important factors impacting business performance are the owner's commitment to the business, formal registration of the business, and the degree to which the business is integrated into the broader business community. This research adds to our understanding of the factors that significantly impact the economic success of Latino-owned small businesses. The results will be helpful to organizations that support the development and sustainability of Latino entrepreneurship.

Keywords: ethnic entrepreneurship; Latino entrepreneurship; small business; SMEs; critical success factors

Citation: Starbird, S. Andrew, Jill M. Martin, Yacanex Posadas, and Alma Gutiérrez. 2022. The Impact of Formality, Integration, and Commitment on the Performance of Latino-Owned Small Businesses. *Administrative Sciences* 12: 105. https://doi.org/10.3390/admsci12030105

Received: 25 July 2022
Accepted: 20 August 2022
Published: 24 August 2022

1. Introduction

A challenge facing many countries is how to support small business growth and development in minority communities. The importance of this goal is exemplified by Latino entrepreneurs in the US. Latinos in the US are starting businesses faster than any other demographic group (Orozco et al. 2020), they own more businesses than any other group, and Latino-owned businesses generate nearly USD 500 billion in annual sales (Fairlie et al. 2020). Despite this evidence of entrepreneurial success, Latino wealth and income lag behind other groups (Bohn and Thorman 2020). In this study, we are interested in identifying the characteristics of Latino-owned small businesses and business owners that are related to financial success. Our hope is that, armed with this information, policymakers and educators can develop programs that support the creation and success of Latino-owned small businesses.

In this study, we focus on a small set of performance drivers, or critical success factors (CSFs), that can be influenced by policymakers and educators. Specifically, we assess the impact of formality, integration, and commitment on the financial success of Latino small business owners in this study. The data comes from a survey of Latino small business owners conducted in the fall of 2020 and the winter of 2021. The survey was designed to measure the motivation and practices of Latino entrepreneurs operating small businesses in the counties that comprise Silicon Valley.

The importance of Latino-owned businesses (LOBs), of which Latino-owned small businesses are a subset, to the economy of Silicon Valley is often overlooked. Large tech-related companies are the focus of the media, policymakers, and even educators. Nevertheless, LOBs are a critical component of the Silicon Valley economy and community.

In a 2012 survey of business owners in Santa Clara County, there were 3033 Hispanic-owned businesses generating a total revenue of almost USD 4.2 billion and employing nearly 25,000 people (New American Economy Research Fund 2016). In this study, we focus on Silicon Valley because we are interested in developing policies and programs that support local businesses, and we are interested in identifying differences between LOBs in our area and LOBs in other areas, if any differences exist.

In the next section, we explore the research related to the impact of formality, integration, and commitment on the success of entrepreneurs. In section three, we present the data, descriptive statistics, and methodology employed to study the relationship between these attributes and business success. That section is followed by a discussion of the results, and we finish with conclusions.

2. Factors Influencing the Success of Latino-Owned Small Businesses: A Literature Review

Our research combines two parallel themes in the literature. The first theme is the identification of performance drivers for small businesses. Performance drivers, or CSFs, are characteristics of the business owner, of the business itself, and of the business environment that impact firm performance (Carpenter and Loveridge 2020). The second theme addresses the challenges and opportunities facing ethnic minority entrepreneurs, specifically Latino entrepreneurs (Cederberg and Villares-Varela 2019; Orozco and Perez 2020).

The characteristics of business owners that are related to business success include demographic, financial, and personality traits. Generally, demographic and financial traits, such as gender, age, and wealth, are easier to measure than personality traits such as tenacity and dedication. Much of the research in this area attempts to identify the impact of one or two attributes on success. For example, Kerr (2017), Nádai and Garai (2017) and Zhao et al. (2021) examine the impact of an entrepreneur's age on firm performance. Similarly, Gupta and Mirchandani (2018), Kiefer et al. (2020), Coleman and Robb (2012), Fairlie and Robb (2009), and Gódány and Mura (2021) attempt to identify the impact of gender on business performance. In addition, there are a number of studies that consider multiple attributes for specific populations or specific industries. For example, Elsafty et al. (2020) consider the effect of an individual's endowment with financial, social, and psychological capital on the success of Egyptian entrepreneurs. Omri et al. (2015) explore the effect of human, social, and financial capital on the success of Tunisian entrepreneurs, and Santarelli and Tran (2013) examine the interplay of human and social capital on the success of Vietnamese entrepreneurs. Other researchers examine the impact of multiple attributes on specific business decisions, such as the decision to exit (Murphy et al. 2019; van Teeffelen and Uhlaner 2013). In addition to the traditional demographic variables of age, gender, and education, we include a variable related to alternative sources of income as a proxy for commitment to the business.

In addition to the characteristics of business owners, there is a considerable body of research related to the impact of business characteristics on success. This work addresses the effect of technology, operations, strategy, formality, and integration. Sykes (1986) made one of the first attempts to formalize this kind of analysis in the context of investment assessment. However, despite decades of research, the debate about which CSFs are truly critical continues unabated (Hu et al. 2015; Simpson et al. 2012). As with business owner characteristics, the research related to business characteristics tends to be focused on specific populations, industries, or strategies. For example, Budiarto and Pramudiati (2018) studied the impact of technology on the success of Indonesian small and medium enterprises (SMEs). Douglas et al. (2017) looked at the CSFs for small- and medium-sized firms in Kenya, and Mura and Hajduová (2021) identified efficiency differences in SMEs associated with different subregions in Slovakia. Moeuf et al. (2020) considered a new means of coordinating production (Industry 4.0) on the performance of SMEs in the EU, and Knol et al. (2018) explored the adoption of lean manufacturing practices on SME performance. In this study, we include four variables related to the business itself. These are the age

of the business, the language used with customers, the location of the business, and the registration status (formal or informal). These variables were selected because they have been shown to significantly impact LOBs. Pisani (2022a) showed that LOB registration is related to the size of the firm and its annual sales revenue, among other things. Pisani and Morales (2020) linked the formal registration of LOBs to several business owner and business characteristics, and Orozco (2020) found a connection between the language used in the business and the business's success. Language and formal registration represent the integration of the business into the broader community.

The third broad category of CSFs is related to the business environment. This research examines competition, trade, regulation, and macroeconomic conditions, and most recently, public health. Often, research in this area focuses on the impact of government policy on firm performance (e.g., Gogokhia and Berulava 2021) or on the importance of aligning business strategy with the broader environment (e.g., Chi et al. 2009; Prajogo 2016). Since the business environment is closely tied with the industry and geography, research often focuses on specific markets (e.g., Abbas et al. 2021; Micheli et al. 2020; Dodd et al. 2018) or specific regions or countries (e.g., Tse et al. 2003; Commander et al. 2011; Branstetter et al. 2014). The measurement of environmental CSFs continues to be a part of the debate (Commander and Svejnar 2011). In this study, we restrict our attention to businesses in the same location, Silicon Valley, facing similar economic conditions.

A second theme, ethnic minority entrepreneurship, and specifically Latino entrepreneurship, is a newer area of research. Much of the work in the area of ethnic minority entrepreneurship is related to understanding ethnic-based differences in the business environment and how entrepreneurs respond to those differences. For example, Howell (2019) explores ethnic-based differences in formal and informal sources of financing in China. Sithas and Surangi (2021) provide a review of the research on ethnic minority entrepreneurship and identify seven research themes including motivations, success factors, and unique challenges. As Rahman et al. (2018) point out, most studies of ethnic minority entrepreneurs focus on regions in which there is a large supportive community. In contrast, they consider the challenges facing a small number of ethnic minority entrepreneurs in the Scottish city of Aberdeen in the UK. Directly related to this study, Peterson and Crittenden (2020) explore the importance of customer orientation as a marketing strategy for Mexican-American entrepreneurs (a subset of Latino entrepreneurs). Their findings suggest that the marketing strategy, whether enclave focused or broader, did not impact perceived performance. In a recent paper, Pisani (2022b) looks specifically at four different market segments and relates LOB participation to the characteristics of the business and of the business owner. Our second hypothesis addresses the relationship between the performance of LOBs and their integration into the broader community.

The importance of Latino entrepreneurship to the economic health of the US is well-documented (Fairlie et al. 2020), and research in this area is growing rapidly. Two areas of research into Latino entrepreneurship that provide a foundation for this paper are business informality and the enclave. In a recent paper, Pisani (2022a) found that formal registration of LOBs depends on the age of the firm, education of the owner, the region of the US, number of employees, and the sales revenue of the business. Similarly, Pisani and Morales (2020) examined informality and business performance of LOBs in the US and found that firm registration was linked to education, gender, and clientele ethnicity. Their work employs a national sample to create a baseline for studying informality and firm registration among LOBs. Orozco (2020) and Pisani et al. (2017) examine the impact of the enclave on LOBs. Orozco (2020) reconceptualizes the definition of the enclave by the characteristics of the economic niche in which LOBs operate. She includes the customer base, language of the business, location, and product orientation, among other characteristics in her analysis and, notably, finds that employment of co-ethnics has a greater impact than a defined geography.

The value and quality of research on CSFs for small businesses is an unresolved issue in the literature. Some researchers question the theoretical model that connects CSFs to firm performance and others question the ability to measure CSFs and perform valid statistical

analyses. For example, Kieser and Nicolai (2005) question the application of sophisticated analyses to identifying critical factors that are subjective and difficult to measure. Similarly, Simpson et al. (2012) question the model that connects CSFs to performance and identify four specific challenges: (1) data collection difficulties, (2) different ways of measuring performance, (3) the business environment for SMEs, and (4) the short-term and personal objectives of business owners. Another important concern is that the connection between CSFs and performance is complicated by variables that are often overlooked by researchers. For example, Masurel et al. (2002) examine the success factors for ethnic entrepreneurs and find that the heterogeneity of ethnicities is an important element in defining success factors. Other studies that call into question the validity of CSF research include Starbuck (2005), Meyer (2005), Franco-Santos et al. (2007), and March and Sutton (1997). As this research shows, one must be cautious interpreting the results of CSF studies, and any research that ascribes one measure of performance to a limited number of difficult-to-measure explanatory variables.

Our study is designed to reveal the importance of formal registration, integration with the mainstream economy, and entrepreneurial commitment to the success of Latino-owned small businesses in Silicon Valley. By understanding the impact of these attributes on firm performance, we can direct our local efforts in a constructive way.

Hypotheses:

H1. *Formally registered Latino-owned small businesses in Silicon Valley are more likely to generate higher sales revenue than businesses that are not formally registered.*

H2. *Latino-owned small businesses that are integrated into the broader community are more likely to generate higher sales revenue than businesses that are not integrated into the broader community.*

H3. *Latino entrepreneurs who commit to one business are more likely to generate higher sales revenue than entrepreneurs who are committed to more than one business.*

3. Data, Descriptive Statistics, and Methodology

In this section, we describe the data collected for the study, provide descriptive statistics, and present our methodology for the analysis.

3.1. Data

The data for this study was collected using a survey of Latino-owned small business owners in two California counties that are identified as a part of Silicon Valley: Santa Clara County and San Mateo County. According to the 2020 Decennial Census (U.S. Census Bureau 2021a), these two counties have a combined population of 2.7 million that includes a Latino or Hispanic population of 679,000. In addition to monolithic companies such as Apple, Meta (formerly Facebook), Adobe, Google, Intel, and Applied Materials, these two counties have 53,380 firms, 81% with fewer than 20 employees in 2019 (U.S. Census Bureau 2021b).

We utilized a purposive sampling procedure to identify respondents. Potential respondents were asked where they were located, whether they owned a business, and how many employees they had. Once qualified, the respondents were given a link to the survey which was offered through Qualtrics. The survey was available in English and Spanish.

The survey was launched in December 2020 and terminated in March 2021. A total of 226 qualified respondents were identified and all completed the survey. Because respondents did not answer every question, our sample size for our ordered logistic model is smaller than 226. The questions in the survey were selected to collect information about business owners, their businesses, and business performance. Questions about business owners included demographic questions as well as questions about motivation and goals. Questions about businesses included questions about location, product or service, customers, revenue, and operations.

3.2. Descriptive Statistics: Business Owners

Table 1 shows the descriptive statistics for the survey respondents. The characteristics of the respondents are similar to the characteristics of samples used by Pisani et al. (2017) and by Orozco (2020). Most of the business owners are female and the majority have roots in Mexico. The sample includes a relatively large proportion of individuals who are married or living together, which is consistent with the relatively high average age of the respondents. About 35% of the respondents report income from sources other than the business that they own.

Table 1. Descriptive Statistics for the Survey Respondents.

Characteristic	Sample Statistics
Female (%)	70.5
Male (%)	29.0
Age	
Mean (years)	41.0
Standard Deviation	9.6
Education	
Some high school (%)	18.2
Completed high school (%)	37.6
Completed technical or vocational training (%)	12.7
Some college (%)	12.2
Associates degree (%)	7.2
Bachelor's degree (%)	8.8
Graduate, professional, or doctorate degree (%)	3.3
Civil status	
Married/Living together (%)	64.6
Divorced or separated (%)	15.1
Single (%)	17.2
Household size	
Mean	3.2
Standard Deviation	1.7
Place of Birth	
Mexico (%)	83.0
United States (%)	9.3
Other Latin America (%)	7.7
Other Sources of Income?	
Yes (%)	35.8
No (%)	64.2

3.3. Descriptive Statistics: Businesses

Table 2 shows the characteristics of the Latino-owned small businesses represented in this sample. The majority of the Latino-owned small businesses are fewer than five years old and have sales revenue of less than USD 50,000 per year. Eighty percent report sales of less than USD 100,000 per year. The business language and ethnicity of the customers are equally balanced among the alternatives. Most of the businesses operate from home or some other fixed location and most are formally registered. Cash is used less for transactions than other means.

Table 2. Descriptive Statistics for the Businesses in the Sample.

Characteristic	Sample Statistics
Firm Age	
Less than 5 years (%)	56.5
5 to 10 years (%)	14.1
10 to 15 years (%)	16.3
More than 15 years (%)	13.0
Sales Revenue per Year	
Less than USD 5000 (%)	21.4
USD 5000 to USD 10,000 (%)	14.8
USD 10,000 to USD 25,000 (%)	12.1
USD 25,000 to USD 50,000 (%)	14.8
USD 50,000 to USD 100,000 (%)	17.6
USD 100,000 to USD 250,000 (%)	12.1
More than USD 250,000 (%)	7.1
Business Language	
Spanish or Mostly Spanish (%)	33.5
Mix of English and Spanish (%)	36.7
English or Mostly English (%)	29.8
Hispanic or Latino Customers	
All or Mostly Hispanic or Latino (%)	39.8
Equal Mix (%)	33.3
All or Mostly non-Hispanic and non-Latino (%)	26.9
Location of Business	
Home (%)	45.4
Rented or Owned Location (%)	34.0
No Fixed Location (%)	20.0
Cash Transactions	
None/Less than Half (%)	53.8
About Half (%)	15.6
All/More than Half (%)	30.6
Business Registration	
Formally Registered (%)	71.8
Not Formally Registered (%)	28.2

3.4. Methodology

To test the hypotheses, we estimated an ordered logistic regression equation that computed the marginal effects of specific attributes on the odds that a firm has high revenue and, separately, on the odds that a firm has low revenue (Hosmer et al. 2013; Menard 2002). The ordered logit model, like other logistic regressions, uses the maximum likelihood method to choose parameter estimates that maximize the probability of an observation. The estimation method iterates with the goal of maximizing the log-likelihood function. The first iteration is a model with no predictors. With each iteration, additional predictors are included until the difference between interactions is small and the model converges. We used the statistical software, STATA, from StataCorp LLC to generate estimates of the coefficients and the measures of fit.

A stepwise method for including predictors in nested equations is a way to evaluate the importance of different predictors. By building nested equations, we can determine whether leaving some variables out of the model will reduce its explanatory power. We utilize a forward selection and add variables at each step. The estimated coefficients can be interpreted as odds ratios for the predictors. That is, the coefficient is the probability that an event occurs over the probability that an event does not occur (Agresti 2013).

Ordered logistic regression (OLR) is a robust tool that has been used in a variety of applications. Rezapour et al. (2019) used OLR to identify the factors influencing the severity of vehicle crashes. Kropat et al. (2017) used this technique to model the potential for geogenic radon potential in Switzerland. OLR has also been used to predict tax compliance in Nigeria (Areo and Gershon 2020), the consumption of mushrooms (Boin and Nunes 2018), and the outcome of occupational injuries in agribusiness operations (Davoudi Kakhki et al. 2019).

4. Results

Results from the OLR estimation of four nested models are presented in Tables 3 and 4. Table 3 shows the estimates of the marginal probabilities that a business is generating high revenue (over USD 25,000) and Table 4 shows the estimates of the marginal probabilities for lower revenue (under USD 25,000). We used the USD 25,000 threshold because it is approximately the median sales revenue of all the respondents. We start with a parsimonious model, Model I, that includes some of the more common demographic variables (age, education, and gender) and one of the variables related to commitment, a fixed location for the business. In Model II, we add another variable related to commitment, income from other sources, and in Model III, we add variables related to integration, such as the use of English in the business. Finally, in Model IV, we add the variable that measures whether or not the business is formally registered. Taken together, the four models allow us to evaluate the marginal impact of the additional variables on the quality of the estimated equation. The likelihood ratio test shows that the addition of the variables for focus and integration add to the explanatory power of the model. This conclusion is supported by the declining value of the Akaike Information Criterion (AIC) metric from Model I to Model IV.

Table 3. Ordered Logit Model for Business Revenue (High Sales Revenue) Among Latino-Owned Small Businesses: Marginal Effects and Standard Errors [+].

Model	I	II	III	IV
Business Owner Characteristics				
Gender (Ref = female)	−0.218 ***	−0.256 ***	−0.165 **	−0.156 **
	(0.0696)	(0.0736)	(0.0670)	(0.0610)
Age of the Owner (Ref = under 30)				
30 to 39 years	0.0725	0.0354	0.0337	0.0874
	(0.0879)	(0.0857)	(0.0785)	(0.0803)
40 to 49 years	0.0764	0.0292	0.0564	0.118
	(0.0844)	(0.0835)	(0.0791)	(0.0828)
50 or more years	0.0969	0.0426	0.0903	0.114
	(0.113)	(0.104)	(0.110)	(0.111)
Supplementary Income Sources (Ref = Yes)		−0.147 ***	−0.147 ***	−0.0892 **
		(0.0457)	(0.0433)	(0.0366)
Owner's Education (Ref = High School)				
Some High School	−0.0375	−0.0101	0.00845	0.0219
	(0.0558)	(0.0605)	(0.0603)	(0.0538)
Technical or Vocational Education	−0.0135	0.0452	0.0251	0.0825
	(0.0575)	(0.0673)	(0.0626)	(0.0673)
College Degree	0.139	0.222 **	0.172 *	0.222 **
	(0.0871)	(0.101)	(0.0949)	(0.0961)

Table 3. *Cont.*

Model	I	II	III	IV
Business Characteristics				
Age of business (Ref = less than 5 years)				
5 to 10 years	0.0957 (0.0673)	0.0886 (0.0672)	0.0834 (0.0647)	0.102 (0.0654)
10 to 15 years	0.0382 (0.0831)	0.0123 (0.0748)	0.0201 (0.0729)	0.0133 (0.0609)
More than 15 years	0.0578 (0.0879)	0.0270 (0.0800)	−0.0228 (0.0639)	−0.0192 (0.0520)
Business Language (Ref = Spanish only)				
Blend of English and Spanish			0.209 *** (0.0720)	0.172 *** (0.0660)
English Only			0.334 *** (0.0877)	0.249 *** (0.0793)
Primary Business Location (Ref = outside home)				
No fixed location	−0.162 *** (0.0437)	−0.151 *** (0.0433)	−0.176 *** (0.0412)	−0.0967 ** (0.0379)
Home-based business	−0.183 *** (0.0527)	−0.151 *** (0.0526)	−0.180 *** (0.0541)	−0.0762 * (0.0450)
Formally registered (Ref = yes)				0.173 *** (0.0376)
N	155	153	153	147
LR (χ^2)	35.49	45.63	69.37	97.02
Degrees of Freedom for LR (χ^2)	12	13	15	16
Akaike Information Criterion (AIC)	416.52	404.04	384.30	343.10

[+] Standard errors are in parentheses. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$.

Table 4. Ordered Logit Model for Business Revenue (Low Sales Revenue) Among Latino-Owned Small Businesses: Marginal Effects and Standard Errors [+].

Model	I	II	III	IV
Business Owner Characteristics				
Gender (Ref = female)	0.146 *** (0.0385)	0.162 *** (0.0387)	0.105 *** (0.0357)	0.0999 *** (0.0334)
Age of the Owner (Ref = under 30)				
30 to 39 years	−0.0587 (0.0637)	−0.0300 (0.0686)	−0.0267 (0.0584)	−0.0645 (0.0504)
40 to 49 years	−0.0644 (0.0665)	−0.0255 (0.0710)	−0.0448 (0.0591)	−0.0878 (0.0542)
50 or more years	−0.0686 (0.0630)	−0.0338 (0.0730)	−0.0577 (0.0535)	−0.0663 (0.0448)
Supplementary Income Sources (Ref = Yes)		0.164 *** (0.0598)	0.161 *** (0.0579)	0.0986 ** (0.0496)
Owner's Education (Ref = High School)				
Some High School	0.0380 (0.0634)	0.00937 (0.0579)	−0.00695 (0.0482)	−0.0179 (0.0398)
Technical or Vocational Education	0.0127 (0.0555)	−0.0367 (0.0495)	−0.0199 (0.0464)	−0.0562 (0.0364)
College Degree	−0.0910 ** (0.0423)	−0.123 *** (0.0385)	−0.0930 *** (0.0361)	−0.103 *** (0.0325)

Table 4. *Cont.*

Model	I	II	III	IV
Business Characteristics				
Age of business (Ref = less than 5 years)				
5 to 10 years	−0.0701 * (0.0408)	−0.0641 (0.0401)	−0.0559 (0.0353)	−0.0630 ** (0.0303)
10 to 15 years	−0.0305 (0.0581)	−0.0106 (0.0614)	−0.0156 (0.0520)	−0.0111 (0.0468)
More than 15 years	−0.0437 (0.0556)	−0.0221 (0.0596)	0.0214 (0.0663)	0.0194 (0.0590)
Business Language (Ref = Spanish only)				
Blend of English and Spanish			−0.138 *** (0.0427)	−0.116 *** (0.0397)
English Only			−0.178 *** (0.0411)	−0.142 *** (0.0394)
Primary Business Location (Ref = outside home)				
No fixed location	0.252 *** (0.0975)	0.233 ** (0.0967)	0.325 *** (0.107)	0.148 * (0.0859)
Home-based business	0.179 *** (0.0550)	0.144 *** (0.0528)	0.165 *** (0.0519)	0.0705 * (0.0419)
Formally registered (Ref = yes)				−0.314 *** (0.0833)
N	155	153	153	147
LR (χ^2)	35.49	45.63	69.37	97.02
Degrees of Freedom for LR (χ^2)	12	13	15	16
Akaike Information Criterion (AIC)	416.52	404.04	384.30	343.10

[+] Standard errors are in parentheses. *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$.

Note that the estimated coefficients are measured as the logarithm of the odds, so to compute the odds, one must exponentiate the coefficients. A negative coefficient results in computed odds less than one, so the variable will have a negative impact on the marginal probability that a business will be in the higher revenue category (Table 3) or the lower revenue category (Table 4). A positive coefficient results in computed odds more than one, so the variable will have a positive impact on the marginal probability that a business will be in a higher revenue category or a lower revenue category.

Figure 1 shows the estimates of the coefficients (log odds) for each of the explanatory variables for the category low sales and the 95% confidence interval for the estimates. Figure 2 shows the estimates of the coefficients (log odds) for each of the explanatory variables for the category high sales and the 95% confidence interval for the estimates. A log odds coefficient of 0 indicates that the variable has no effect on the chance that a business is in the associated category (low or high sales). A positive coefficient suggests that the variable increases the chance that the business is in a particular category, and a negative coefficient suggests that the variable decreases the chance that the business is in a particular category. The business characteristics that appear to have little or no impact on the sales category are home-based businesses and business age. On the other hand, the business characteristics that appear to be significant are whether or not the business is formally registered and the language used in the business. Absence of a fixed location appears to decrease the chance that the business is in the high sales category.

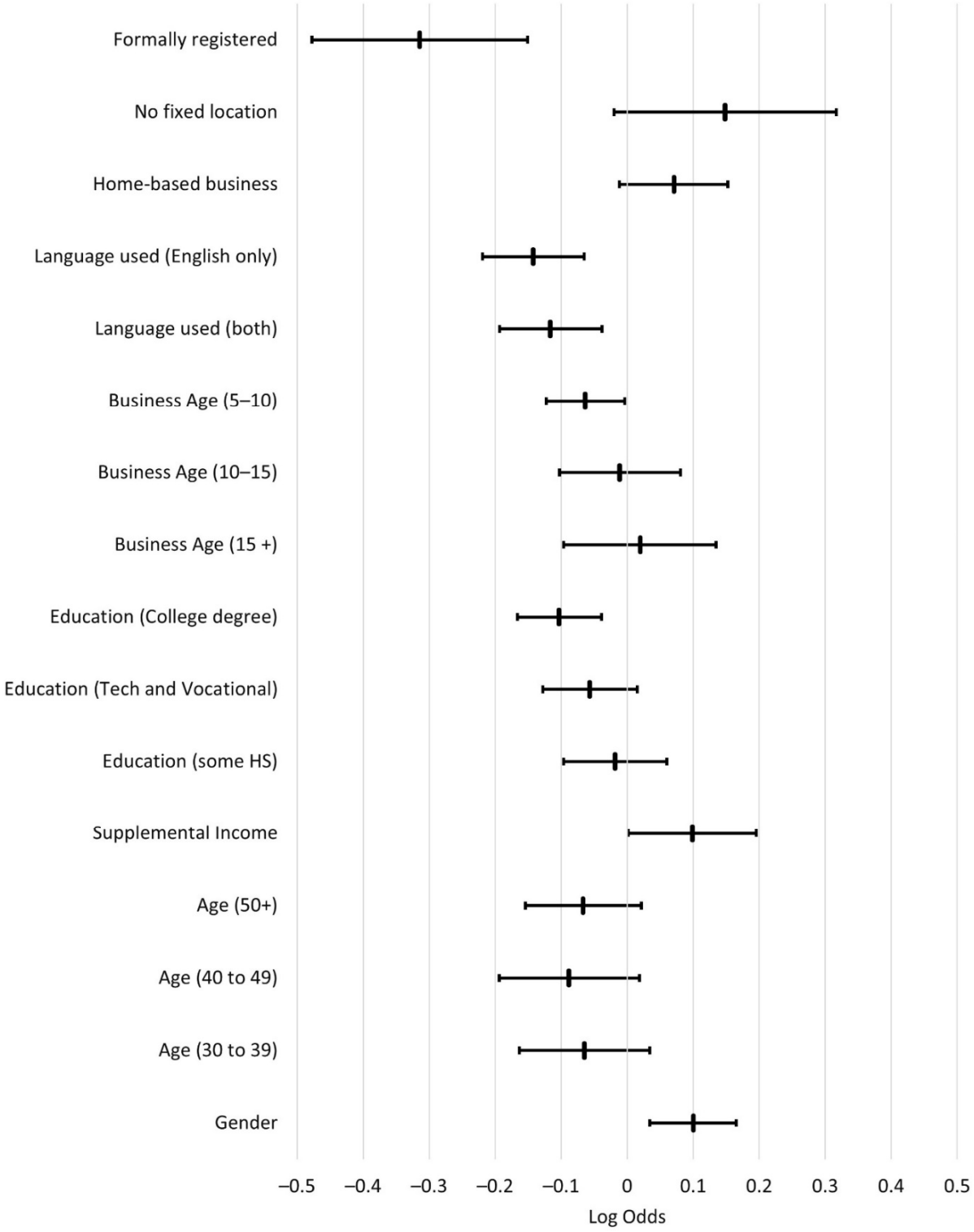

Figure 1. Coefficient estimates and 95% confidence intervals for the low sales category.

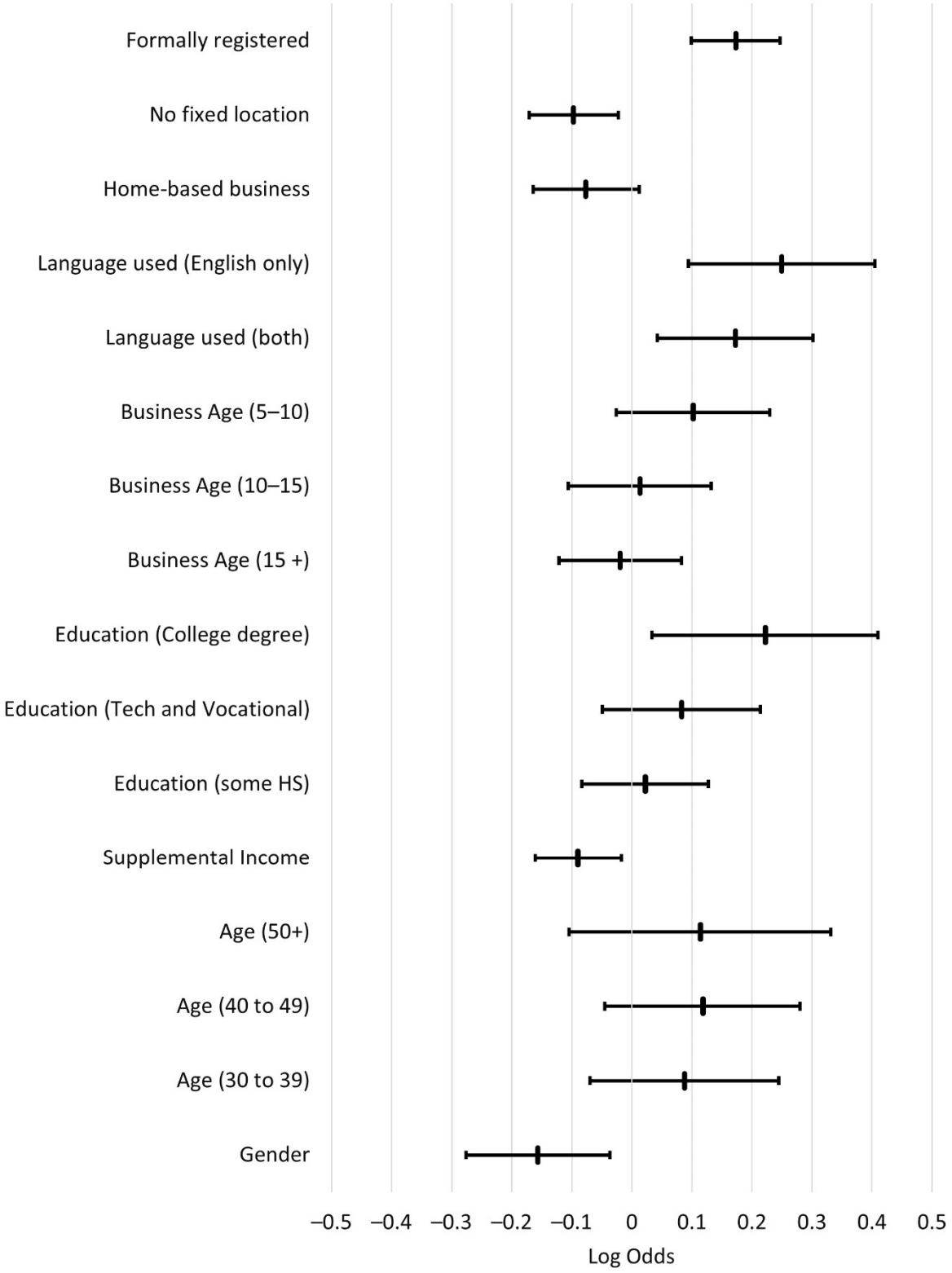

Figure 2. Coefficient estimates and 95% confidence intervals for the high sales category.

The business owner characteristics that appear to have no impact on the sales category are education up to a college degree. However, a college degree appears to increase the chance that a business has high sales and decrease the chance that a business has low sales. Age has no impact on the sales category but gender clearly does, with women having a lower chance of owning a business with high sales and a higher chance of owning a

business with low sales. Finally, the existence of supplemental income reduces the chance that a business has high sales and increases the chance that a business has low sales. The challenge with this variable, of course, is determining whether a business owner has a supplemental income source because the business has low sales, or the business has low sales because the business owner is not focused exclusively on the success of the business.

5. Conclusions and Implications

In this paper, we simultaneously consider three aspects of ethnic entrepreneurship that have been shown to influence small business performance: formality, integration, and commitment. We found that all three were important in explaining the performance of Latino entrepreneurs in Silicon Valley and that these variables were often more important than other factors such as age and education in explaining performance. One advantage of this study is that it considers data from the same geographic area and the same period, allowing us to focus on business characteristics and business owner characteristics.

The results of this survey identify several factors that are related to the financial success of Latino-owned small businesses and suggest several strategies for increasing the odds that they become financially successful businesses. The most powerful factor appears to be the formal registration of the business. This result is consistent with the findings in other geographic areas (Ullah et al. 2019; McCaig and Nanowski 2019). The implication of this finding is that policymakers and small business advocates should work with entrepreneurs to formally register small businesses owned by Latinos. Clearly, registration itself is not the reason the businesses are successful. It is more likely that the process of registration, which requires answering questions about a business's product/service, customers, etc., may lead small business entrepreneurs to ask themselves questions they might not otherwise answer related to the business, its focus, and their strategy for growth. Formal registration may also be a proxy variable for commitment to the business. This result supports our first hypothesis, H1.

Consistent with other studies, the mixed use of English and Spanish is also closely related to the financial success of the businesses in our sample. This result suggests that businesses that are integrated into the broader community are more likely to experience greater sales. This result is true even in the business enclaves, as defined by Orozco (2020) and Pisani et al. (2017). Based on this finding, policymakers should consider ways to diversify the customer base of Latino-owned small businesses that are operating in an enclave. This effort might involve language or cultural training that extends to other enclaves in the region. In Silicon Valley, for example, there are significant Chinese, Vietnamese, and Korean enclaves that may offer sales opportunities for LOBs. This goal may be challenging, however, given the recent work of Orozco (2022), who found that the ethnicity of entrepreneurs can impact the strategies employed. In addition, we must recognize that the goal of entrepreneurs is not always the same. The familiarity of the enclave may be more important than the financial success that comes from integration. This result supports our second hypothesis, H2.

Our findings also suggest that commitment is important, but that it is less important than other demographic factors such as gender. Part of this finding is clearly due to the difficulty in measuring commitment. Our measure, supplemental income, reflects a number of latent variables. Even if a policy that supports commitment could be developed, it would not be as important as formality and integration as CSFs. While the result supports our third hypothesis, H3, additional work is needed to increase confidence.

Another interesting result is that, compared with larger more diverse samples, the change in the odds is weaker. The implication is that while commitment, formality, and integration are important and relevant to the success of the businesses, the marginal change in the odds is smaller for this sample than in others. This might imply that there is a difference in the opportunities in Silicon Valley and that these variables, while statistically significant, are not as powerful as they are in other regions.

This research is limited by the size and location and timing of the sample. A number of respondents left questions unanswered—limiting the degrees of freedom in our analysis and weakening the strength of our conclusions. Similarly, the sample comes from Silicon Valley, a region with a healthy and significant business environment—even during the pandemic. The region's commitment to entrepreneurship is not in question, but its focus on opportunity-motivated entrepreneurs leaves many underserved. Finally, this survey was conducted in the midst of the COVID-19 pandemic, and that fact limits the comparability and generalizability of the results.

Future research should consider other goals of small business owners, other factors that explain financial success, and other demographic groups. While this study focused on financial success as measured by sales revenue, small business owners have a variety of goals of which financial success is only one. Other goals include resource-sharing among family members (Trigos and Doria 2020) and autonomy and independence (Van Gelderen et al. 2020). Similarly, there are many other factors that are related to the financial success of any business including operational productivity, competitive pressures, and regional economic strength. One of the most important and interesting factors is the product or service offered by the business. Finally, this analysis focuses on the Latino community, an ethnically and culturally diverse demographic group in many countries. Future research might compare the findings here with other minority groups in the US and in other countries.

Author Contributions: Conceptualization: S.A.S., J.M.M., Y.P.; methodology: S.A.S., A.G.; data collection: Y.P., A.G.; formal analysis and investigation: S.A.S., A.G.; writing-original draft presentation: S.A.S., J.M.M., Y.P.; writing-review and edition: S.A.S., J.M.M.; funding acquisition: S.A.S., J.M.M., Y.P.; resources: S.A.S., J.M.M., Y.P.; supervision: S.A.S. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by the Ciocca Center at Santa Clara University.

Institutional Review Board Statement: This research was approved by the Institutional Review Board of Santa Clara University (protocol application 20-09-1496, approved on 09 October 2020).

Informed Consent Statement: All respondents provided informed consent before answering questions.

Data Availability Statement: Data are available from the corresponding author.

Conflicts of Interest: The authors declare no conflict of interest.

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