Success Factors for Small Businesses in Guanajuato, Mexico

Judith Banda Guzmán
Department of Art & Business
Guanajuato University
Guanajuato, México

Robert N. Lussier
Professor of Management
Department of Business Management
Springfield College
Springfield, MA 01109

Abstract

The purpose of this research was to analyze the success versus failure variables in Guanajuato State, Mexico using the Lussier model with a sample of 303 small businesses (199 successful, and 104 failed) using personal interviews. Logistic regression analysis supported three variables. A small business that uses (1) professional advice (2) can successfully attract and retain employees, and (3) with partners has a greater chance of success. The overall classification accuracy rate was 66.3%. Results support the model's validity in Mexico reinforcing its global validity and moving toward a theory. Implications for research and small business owners is discussed.

Keywords: Success Factors, Small Businesses, Guanajuato.

1.　Introduction

The definition of small and medium enterprises (SMEs) varies from country to country (Mahmood, Asif, Imran, Aziz, & I-Azam, 2011). In Mexico, SMEs have 250 or fewer employees, and 46% are commerce businesses, 12% manufacturing, 11% hotel and food services, with 31% in other categories (Censos Económicos, 2009). SMEs comprise 99.8% of the business that contribute to the GDP by generating 65% of the formal labor force (Censos Económicos, 2009). Globally; SMEs contribute to productive employment, income generation, and poverty reduction. The best way to reduce poverty is to promote economic growing through increased SMEs that create employment opportunities (ONUDI, 2013). However, SME business success rate in Mexico is between 25 to 30%, which is lower than the world average of around 40% (Fernández, 2010).

Mexico is an important member of NAFTA, and it is ranked as the eleventh economy in purchasing power (PP) by generating goods and services valued at one billion 249 thousand dollars. But in terms of purchasing power it is ranked in 76th place (Banco Mundial, 2008 cited by González, 2008).

So the possibilities of creating a profitable company is a critic topic for those who want to start a new business, those who advise and assist them, lenders and investors, and for government policies to support startups (Dennis & Fernald, 2001). Understanding why some SMEs are successful and others fail is crucial for the stability of a country (Pompe & Bilderbeek, 2005). Thus, an important research question is "Which variables contribute to success and failure?" As shown in Table 2, there is great discrepancy in the literature and there is no accepted theory of success versus failure (Marom & Lussier, 2014). Therefore, there is need for further research (Rogoff et al., 2004). The objective of this study was to analyze the variables of success versus failure using the Lussier (1995) model. This is the first such study conducted in Mexico.

2.　Literature Review

Mexico is located as the second NAFTA economy in Latin American according to the International Monetary Fund. Their exports have multiplied by seven. In 1993, the country exported 51 thousand 886 million dollars: 37 % in manufacturing, 70% was oil.

For the year 2012, Mexico raised exports to 370 thousand 705 million; 87% for manufacturing and 15% for mining. The main exports to the world, in accordance of the Banco of Mexico are: Machines and electric material; Terrain vehicles and parts: Mechanic devices, Mineral fuels and their products; Pearls, precious stones and metals; Instruments and optic and medic devices; Raw plastics and plastic parts; Minerals, vegetables, plants, tubercles, beverages and vinegar (Forbes, 2014). Since the incorporation of Mexico to the general agreement of commerce and tariff (GATT) in 1936, it has accumulated 30 trade agreements, including NAFTA, for the promotion and protection of mutual investments and 9 agreements of commerce in the frame of the Latin associations (Forbes, 2014). On the positive side, in Mexico the younger generation has an entrepreneurial mindset at the age of 20 to 25 years old; this contrasts with the average age of 40 years of American founders (Fernández, 2010). Some 60% of the successful Mexican entrepreneurs have family businesses (Beuter, 2014). A major problem blocking the startup and sustainability of Mexican small businesses is funding; 70 % of the companies that require funding do not obtain any money. Thus, limiting startups and their size, as owners had to self-fund or acquire partners (Censos Económicos, 2009, cited by Secretaria de Economía, 2014). Around 61% of small businesses have two or more partners (CNBV, 2010).

Another problem is the lack of training. Most Mexican entrepreneurs have a limited knowledge about starting and operating a business. Their previous business management experience is almost nonexistent (Secretaría de Economía, 2014), as only 2 of 10 entrepreneurs have had previous experience (Banco Interamericano de Desarrollo cited by CNN, 2011). Some 48% of entrepreneurs have a bachelor degree, usually not in business, (Observatorio Py ME, 2002), and when applying for financing resources they don't work with a business consultant for help. There is also limited entrepreneurial training (Fernández, 2010).Studies in Mexico have found a relationship between strategic planning and business success (Navarrete & Sansores, 2011). However, related to training, from the 99.8% of the SMEs in Mexico, an estimated 90% start without abusiness plan (El Economista, 2014).

Another problem area is employee turnover, according to the Secretaría de Economía(2011).Turnover rates include: transportation with 72.73%, manufacture with 45.61%, services 32% and construction 17.78%. A major cause of staff turnover is employees searching for a better job. Mexican SMEs also lack technology and the use of the Internet to promote their companies and conduct business. Only around 50% of them acquire electronic domains for advertising and offer their economic activity thought the creation of simple or complex web sites. Many only use free sites or other free tools like blogs (Secretaría de Economía, 2011). Aragón, Ballina, Calvo-Flores, Garcia & Madrid (2004) conducted a study in the state of Veracruz, Mexico and found that the most important factor of success are: Develop of new products/services, Lower prices than their competitors, Access to new markets, Quality of the product/service, Flexibility of the productive or commercial process, Research and development, Technological process, Focus on flexible technologies and innovation, Training and molded of people, Customer service, Marketing, Integrity, and company image.

Estrada, García & Sánchez- (2009) conducted a study of the factors that determine success of SMEs using a sample of 405 Mexican companies. Results support that highly competitive companies are the ones that have innovation in their products, process and management with a high technological level and they have strategic plans. Note that the above two studies by Aragón, et al. (2004) and Estrada, et al. (2009) findings relate more to larger size well established innovative SMEs, rather than the more traditional smaller startup business that is not offering new and innovative products or services using technology. In Mexico, no successes versus failure predict model studies were found focusing on small businesses, which is the focus of this study. Also, the two prior studies are now dated.

3.   *Method*

3.1.   **Selection of the Model**

The Lussier (1995) model was selected to be utilized in this study due to the efficacy of the 15 variables identified from 20 previous studies. The model has been published in more journals (Lussier 1995, 1996a, 1996b; Lussier & Corman, 1996; Lussier & Pfeifer, 2000; Lussier & Halabi, 2010; Marom & Lussier, 2014) than any other model and it has been utilized to predict the success or failure in different parts of the world including Croatia (Lussier & Pfeifer, 2000); Chile (Lussier & Halabi, 2010); and Israel (Marom & Lussier, 2014). One of the advantages of the Model is that it is not simply a financial model, making it more appropriate for startup businesses with no prior quantitative data for use in the model (Dennis & Fernald, 2001).

The theoretical model from Lussier (1995) identified 15 variables from the literature and for each variable from the literature a hypothesis was developed to explain the relationship between the 15 independent variables and the dependent variable of success vs failure. See Table 1 for an explanation of the 15 independent variables Lussier Model.

See Table 2 for a comparison of the variables identified in 31 articles from the literature as factors that contribute on the success or failure. Due to the great discrepancy in the literature, there is no unified theory of the success versus the failure of small business. Therefore, this is study identifies the variables that can predict the success vs the failure in Mexico, and at the same time can contribute to developing a global model.

An extended revision of the literature was conducted to identify the variables that influence success of small companies, starting with the need for necessary capital (González, Correa &Acosta,2012; Vivanco, Aguilera & González, 2011; Sefiani & Bown, 2013); control records (Lussier&Halabi,2010; Lussier & Pfeifer, 2001); previous experience in theindustry and time to lead the organization (Arasti, Zandi & Talebi, 2012; Chawla, Khanna & Chen,2010; Islam, Aktaruzzaman, & Muhammad, 2011; Lussier & Halabi, 2010; Van Praag, 2003);the use of written business plan(Mazzarol, 2009);professional counseling(Dobbs & Hamilton, 2007); prior knowledge and education (Chawla, Pullig, Alexander, 1997; Coy, Shipley, Omer & Nisar, 2007; Lussier & Halabi, 2010; Lussier & Pfeifer,2001; Simpson, Tuck y Bellamy,2004); using skilled labor (Arasti, Zandi, &Talebi, 2012; Lussier & Halabi, 2010), and marketing skills(Aguta & Balcioglu, 2015; Ardjouman & Asma, 2015; Simpson et al., 2006).

The model includes a total of 15 variables identified in the updated literature. Benzing et al.(2009) concluded that the success factors have variations among countries, therefore there is a need to test the models in various countries to evaluate the robustness of the results (Bono & McNamar, 2011). This research used the Lussier (1995) Model quiestionnaire. The survey instrument was translated into Spanish by a professional and the questionnaire was piloted tested for accuracy in translation. The questionnaire included all 15 variables used in the Lussier Model (1995) that was previously validated. Again, see Table 1 and 2 for an explanation of the 15 model variables analized in this study.

3.2.   Sampling and Data Collection

The population was defined as all the small businesses in Guanajuato. Random samples of small businesses were selected within 27 municipalities in the Guanajuato State, Mexico. A total of 303 businesses completed the questionnaire. Of the respondents, 199 (66%) were classified as successfully making a profit and 104 (34%) as failing due to lack of profitability. Peronal interview survey research was used for data collection. The questionnaire was answered by phone and personal interviews were conducted with the managers or owners of small businesess of Leon, Celaya, Irapuato, San Francisco del Rincon and others in 23 municipalities in the Guanajuata State.

3.3.   Statistical Analysis

SPSS software was used for data analysis. Logistic regression was run to test the model and each of the 15 variables measuring the success factors of the small business sample.

4.   *Results and Discussion*

Descriptive statistics for the sample mean and standard deviation includes: Age (m =33.76 / s.d. 9.15), Years of conducting business (m =14.34 /s.d.= 12.48), and Number of employees (m = 18.53 /s.d. = 27.46). Logistic regression analysis of the entire 15 variable model was not significant (p = .450). A major reason is most likely due to the fact that the failed business were not truly failed because they were still in business. Thus, when the sample is too similar, it is difficult to find significant difference distinguishing success from failure.

However, the second logistic regression analysis of classification accuracy of the model beats random guessing with a 50% probability of success because the overall accuracy of the model is 66%. Thus, the model beats random guessing by 16%. Also, the classification was 94.5% accurate at identifying a specific business as successful firms, whereas it was only accurate at predicting failed businesses 12.5% within the sample. Thus, a business owner has a greater probability of success if it considers the variables in the model, rather than random guessing. Also, the third logistic regression analysis of determining if each individual variable is a predictor of success or failure indicated that two of the variables are significant at the .05 level and one at the .10 level of significance. Thus:

- A business that uses professional advice has a greater chance of success ($p = .040$).
- A business that can successfully attract and retain employees has a greater chance of success ($p = .046$).
- A business with partners has a greater chance of success ($p = .098$).

The most likely reason for the lack of significance for the other individual independent variables is because the model has near multicollinearity. Near multicollinearity, also called faced or just multicollinearity, exist when one independent variable is linearly dependent to one or more other independent variables; without the variable(s) the estimators would not exist. For example, the number of years of industry experience, the number of years of management experience, and the age of the owner are exceedingly likely to be correlated.

5.   *Limitations, Implications and Conclusions*

This study has limitations, including the subjective measures of the questionnaire. Further research can make the measures more objective. The sample also includes several economic sectors, so the results do not indicate the characteristics of each industry. Also, Mexico does not have database of failed businesses, so the percentage of unprofitable enterprises was lower, so it could not validate the entire model as hypothesized. For further research, data from actual failed companies should be obtained.

This study has implications for employers, researchers, and government. In Mexico and other countries it is important to promote the survival of small businesses for their potential it brings to the economy of a country. The results of this study can help governments and institutions to understand why it is important to identify those variables that determine the success or failure of a small business and providing the necessary tools to increase their performance.

The fact that the Lussier (1995) model variables do in fact predict success and failure in five very different parts of the world, North America U.S.A. and Mexico, South America Chile, Central Eastern Europe Croatia, and in the Middle East Israel, is of importance because success versus failure prediction research benefits both the would be and current entrepreneurs; those who assist, train and advise them; those who provide capital for their ventures; their suppliers; and public policy makers. If they use the model to assess a firm's potential for success, society can benefit in direct and indirect ways via the maximization in the allocation of limited resources (entrepreneurial capital, investments and loans, government aid, and so forth) toward higher potential businesses.

A promising finding of this study is that although there is great discrepancy in the literature, see Table 2, and differences between countries, the Lussier (1995) model is significant in five different countries from varying parts of the world. Maybe business successes vs. failure variables in different countries are more similar than people realize, or maybe it is the effect of globalization. The exploratory global success vs. failure prediction model may be a significant predictor in other countries as well. Although there is much discrepancy in the literature, and no unifying theory, this study helps to move us in that direction. With the trend toward increasing globalization, international global business successes vs. failure prediction models become more valuable.

References

Aguta, U. I., & Hasret, B. (2015). The Impact of Human Resource Management Practices on Organizational Performance: A Case of Private Banks in North Cyprus. International Journal of Business and Social Science, 6(6), 251-268.

Aragón, A., Ballina, F., Calvo-Flores, A., García, D., & Madrid, A. (2004). Análisis Estratégico para el Desarrollo de la Pequeña y Mediana Empresa. México: Instituto Mexicano de Contadores Públicos, A.C.

Arasti, Z., Zandi, F., & Talebi, K. (2012). Exploring the Efect of Individual Factors on Business Failure in Iranian New Established Small Business. International Business Research, 5(4), 2-11.

Ardjouman, D., & Asma, B. (2015). Marketing Management Strategies Affecting Performance of Small and Medium. International Journal of Business and Social Science, 6(4), 141-150.

Benzing, C., Manh Chu, H., & Kara, O. (2009). Entrepreneurs in Turkey: A Factor Analysis of Motivations, Success Factors, and Problems. Journal of Small Business Management, 47(1), 58-91.

Beuter, J. (2014). Obtenido de https://www.wealthmanagement.bnpparibas.com/public/en/achieving-your-goals-entrepreneur-report

Bono, J., & McNamar, G. (2011). From the Editors. Academy of Management Journal, 47(1), 657-660.

Censos Económicos. (2009). Obtenido de
        http://www.inegi.org.mx/est/contenidos/espanol/proyectos/censos/ce2009/

Chawla, S., Khanna, D., & Chen, J. (2010). Are Small Bussiness Critical Success Factors Same in Different
        Countries? SIES Journal of Management, 7(1), 1-12.

Chawla, S., Pullig, C., & Alexander, D. (1997). Critical Success Factors from an Organizational Life Cycle
        Perspective: Perceptions of Small Business Owner from Different Business Enviroments. Journal of
        Business and Entrepeneurship, 9(1), 47-58.

CNN. (2011). Obtenido de http://www.cnnexpansion.com/emprendedores/2011/01/04/conoce-el-adn-de-un-
        emprendedor

CNVB. (2010). Obtenido de http://www.cnbv.gob.mx/Prensa/Estudios/Reporte%20de%20la%20ENAFIN.pdf

Coy, S., Shipley, M., Omer, K., & Nisar, R. (2007). Factors Contributory to Success: A Estudy of Pakistan´s
        Small Business Owners. Journal of Developmental Entrepeneurship, 12(2), 181-198.

Dennis, R. (2007). La Tecnología de Invernadero en el Valle del Yaqui. Una Alternativa para el Desarrollo
        Regional. Octavo Congreso Nacional y Cuarto Congreso Internacional de la Red de Investigación y
        Docencia sobre Innovación.

Dennis, W. J., & Fernald, L. W. (2001). The Chances of Financial Success (and Loss) From Small Business
        Ownership. Entrepeneurship Theory and Practice, 26(1), 75-83.

Dobbs, M., & Hamilton, R. (2007). Small Business Growth: Recent Evidence and New Directions. International
        Journal of Entrepeneurial Behaviour & Research, 13(5), 296-322.

Economista, E. (s.f.). Pymes de México, Sin planeación de Negocios. Obtenido de
        http://eleconomista.com.mx/industrias/2013/01/25/pymes-mexico-sin-planeacion-negocios

Estrada, R., García, D., & Sánchez, V. G. (2009). Factores Determinantes del Éxito Competitivo de la PyME:
        Estudio Empírico en México. Revista Venezolana de Gerencia, 14(46), 169-182.

Fernández, D. (2010). Cinco Problemas de las Pymes para el Éxito. CNN Expansión.

Forbes. (2014). México se Perfila como la Economía 10 a Nivel Mundial. Obtenido de
        http://www.forbes.com.mx/mexico-se-perfila-como-la-economia-10-nivel-mundial/

González, A. L., & Correa, A. (2002). Factores Determinantes de la Rentabilidad Financiera de las PyMEs.
        Revista Española de Financiación y Contabilidad, 31(112), 395-429.

González, R. (2008). México: Undécima Economía, pero Ocupa Lugar 76 en Poder de Compra. Obtenido de
        http://www.jornada.unam.mx/2008/04/12/index.php?section=economia&article=023n1eco

Islam, A., Aktaruzzaman, M., Muhammad, A., & Alam, S. (2011). Effect of Entrepeneur and Firm Characteristics
        on the Business Success of Small and Medium Enterprises in Bangladesh. International Journal of
        Business and Management, 6(3), 289-299.

Lussier, R. N. (1995). A Nonfinancial Business Success Versus Failure Prediction Model for Young Firms.
        Journal of Small Business Management, 3(1), 8-20.

Lussier, R. N. (1996). A Business Success Versus Failure Prediction Model forService Industries. Journal of
        Business and Entrepeneurship, 8(2), 23-37.

Lussier, R. N. (1996). A Startup Business Success Versus Failure Prediction Model for the Retail Industry. Mid-
        Atlantic Journal of Business, 32(2), 79-92.

Lussier, R., & Corman. (1996). A Business Success Versus Failure Prediction Model for Entrepreneurs with 0-10
        Employees. Journal of Small Business Strategy, 7(1), 21-35.

Lussier, R., & Halabi, C. (2010). A Three-Country Comparison of the Business Success Versus Failure Prediction
        Model. Journal of Small Business Management, 48(3), 360-377.

Lussier, R., & Pfeifer, S. (2001). A Crossnational Prediction Model for Business Success. Journal of Small
        Bussiness Management, 39(3), 228-239.

Mahmood, J., Asif, M., Imran, A., Aziz, R., & I-Azam, R. (2011). Determinants of Business Success of Small and
        Medium Enterprises. International Journal of Business and Social Science, 2(20), 274-280.

Marom, S., & Lussier, R. N. (2014). A Business Success Versus Failure Prediction Small Businesses in Israel.
        Business and Economic Research, 4(2), 63-81.

Mazzarol, T., Reboud, S., & Soutar, G. N. (2009). Strategic Planning in Growth Oriented Small Firms.
        International Journal of Entrepenurial Behaviour & Research, 15(4), 320-345.

Navarrete, E., & Sansores, E. (2011). El Fracaso de las Micro, Pequeñas y Medianas Empresas en Quintana Roo,
        México: Un Análisis Multivariante. Revista Internacional Administración y Finanzas, 4(3), 1-14.

Observatorio PyME. (2002). Obtenido de http://i2.esmas.com/documents/2009/08/26/107/estadisticas-pymes.pdf

Organización de las Naciones Unidas para el Desarrollo Industrial. (2013). Informe.

Pompe, P., & Bilderbeek, J. (2005). The prediction of Bankruptey of Small-and Medium-Sized Industrial Firms. Journal of Business Venturing, 20(6), 847-868.

Rogoff, E. G., Lee, M., & Suh, D. C. (2004). "Who done it? Atributions by Entrepeneurs and Experts of the Factors that Cause and Impede Small Business Success. Journal of Small Businesess Management, 42(4), 364-376.

Secretaria de Economía. (2011). Secretaría de Economía. Recuperado el 18 de Noviembre de 2011, de http://www.economia.gob.mx/index.php/component/content/article/186-pymes/6822-las-pymes-y-su-papel-en-el-desarrollo-de-la-economia-de-mexico

Secretaria de Economía. (2014). Obtenido de http://www.economia.gob.mx/delegaciones-de-la-se/estatales/guanajuato#

Sefiani, Y., & Bown, R. (2013). What Influences the Success of Manufacturing SMEs? A Perspective from Tangier. International Journal of Business and Social Science, 4(7), 297-309.

Simpson, M., Tuck, N., & Bellamy, S. (2004). Small Business Success Factors: The Role of Education and Training. Education + Training, 46(8/9), 481-491.

Van Praag, M. (2003). Business Survival and Success of Young Small Business Owners. Small Business Economics, 21(1), 1-17.

Vivanco, J., Aguilera, L., & González, M. (2011). Desarrollo de las Pymes con Base en la Adopción de Estrategias Financieras en Aguascalientes. Obtenido de
http://congreso.investiga.fca.unam.mx/docs/anteriores/xvi/docs/1G.pdf

Table 1
Explanation of success versus failure variables

Capital (capt): Businesses that start undercapitalized have a greater chance of failure than firms that start with adequate capital.

Record keeping and financial control (rkfc): Businesses that do not keep updated and accurate record and do not use adequate financial controls have a greater chance of failure than firms that you.

Industry experience (inex): Businesses managed by people without prior industry experience have a greater chance of failure than firms that are managed by people with prior management experience.

Planning (plan). Businesses that do not develop specific business plans have a greater chance of failure than firms that do.

Professional Advisors (prad). Businesses that do not use professional advisors have a greater chance of failure than firms using professional advisors.

Education (educ). People without any college education who start a business have a greater chance of failing than people with one or more years of college education.

Staffing (staff). Businesses that cannot attract and retain quality employees have a greater chance of failure than firms that can.

Product/Service Timing (psti). Businesses that select products/services that are too new or too old have a greater chance of failure than firms that select products/services that are in the growth stage.

Economic Timing (ecti). Businesses that start during a recession have a greater chance to fail than firms that start during expansion periods.

Age (age). Younger people who start a business have a greater chance to fail than older people starting a business.

Partners (part). A business started by one person has a greater chance of failure than a firm started by more than one person.

Parents (pent). Business owners whose parents did not own a business have a greater chance of failure than owners whose parents did own a business.

Minority (mior). Minorities have a greater chance of failure than nonminorities.

Marketing (mrkt). Business owners without marketing skills have a greater chance of failure than owners with marketing skills.

Table 2
A Comparison of Variables Identified in 31 Articles as Factors Contributing to
Business Success versus Failure

Independent Variables Author (First)	capt	rkfc	inex	maex	plan	prad	educ	staf	psti	ecti	age	part	pent	mior	mrkt
Barsley	F	-	F	F	F	F	-	-	-	-	-	-	-	-	-
Bruno	F	F	-	F	F	-	-	F	F	F	-	-	-	-	F
Cooper 90	F	-	N	N	F	F	N	-	F	F	F	F	-	F	-
Cooper 91	F	-	F	N	-	F	F	-	N	N	N	N	F	F	-
Crawford	-	-	F	-	-	F	F	-	-	N	N	-	-	-	-
Cressy	F	-	-	F	-	-	-	-	-	-	-	-	-	-	-
D+B St.	F	F	F	F	-	-	-	-	-	F	-	-	-	-	-
Flahvin	F	F	F	F	-	F	-	F	-	-	-	-	-	-	-
Gaskill	N	F	F	F	F	F	N	-	-	N	-	-	-	-	F
Hoad	-	-	F	N	N	F	F	-	-	-	-	-	-	-	-
Kennedy	F	-	-	F	F	-	-	-	-	F	-	-	-	-	-
Lauzen	F	F	-	F	F	-	-	F	-	-	-	-	-	-	-
Lussier 95	N	N	N	N	F	F	F	F	N	N	N	N	F	N	N
Lussier 96ª	N	F	N	F	F	F	N	F	N	F	N	F	F	N	F
Lussier 96b	N	F	N	N	F	F	N	N	F	F	F	N	N	N	N
Lussier&Corman 96	F	F	F	N	F	F	F	F	N	F	N	N	F	F	N
Lussier&Pfeifer 01	N	N	N	N	F	F	F	F	N	N	N	N	N	N	N
Lussier&Halabi 10	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Marom&Lussier 14	F	F	N	N	F	F	N	N	N	N	F	N	N	N	N
McQueen	F	-	F	F	-	-	-	-	-	-	-	-	-	-	F
Rauch	-	-	F	F	-	-	F	-	-	-	-	-	-	-	-
Reynolds 87	F	F	-	-	F	-	-	N	F	-	-	-	-	-	N
Reynolds 89	F	F	-	-	F	-	N	N	F	-	N	F	-	-	-
Sage	F	-	-	F	-	-	F	-	-	-	-	-	-	-	-
Santarelli	-	-	-	-	-	-	F	-	-	F	-	-	-	-	-
Sommers	-	-	-	F	F	-	-	F	-	-	-	-	-	-	-
Thompson	N	-	-	F	F	-	-	F	F	-	-	-	-	-	F
Vesper	F	F	F	F	N	F	F	-	F	F	-	F	-	-	F
Wight	F	F	-	F	-	F	-	-	-	-	-	-	-	-	-
Wiklund	F	-	-	F	-	-	-	-	-	-	-	-	-	-	-
Wood	-	F	F	F	F	-	F	-	-	-	-	-	-	-	-
Total F	18	14	12	18	17	15	11	9	7	9	2	4	4	3	6
Total N	7	3	7	9	3	1	7	5	7	7	9	7	4	6	7
Total -	6	14	12	4	11	15	13	17	17	15	20	20	23	22	18

F   supports variable as a contributing factor

N   does not support variable as a contributing factor as an individual variable

-   does not mention variable as a contributing factor