The Microeconomics Study of the Relationship Between Resilience and the Strategic Management With the Financial Innovation Process in the United States

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Microbusiness owners are one of the major keys to turn around cities and states from economic ruin. However, microbusiness owners have a difficult task of coping with operating their companies while striving to become more innovative to survive and grow with a lack of resources. The purpose of this quantitative correlational study is to determine if and to what extent there is a relationship between resilience and financial innovation in the microeconomics business market in the state of Michigan in the United States. The research design is a correlational analysis. The researcher used the Connor and Davidson Resilience Framework as the theoretical outline which led the research question for this study. The researcher collected primary data via an electronic survey administered to a convenience sample from 84 entrepreneurs renting spaces at TechTown. The researcher used the nonparametric Spearman's rho correlation to analyze the relationship between resilience and financial innovation. Microbusiness owners will benefit from the insight gained from this study to make more informed decisions to become more innovative.

Keywords: resilience, financial innovation, microbusiness, strategic management

INTRODUCTION

This study analyzed the relationship between resilience and financial innovation in the microeconomics business market within the state of Michigan in the United States. Microbusiness owners desperately need to find other innovative drivers to survive, to grow their businesses, and create more jobs for economic growth. Pethokoukis (2014) revealed that job creation from new businesses has continued to fall as entrepreneurship has declined in recent years. Zach (2017) suggested that future research in microbusinesses on the effects of other collaborative financial innovation drivers such as entrepreneurship needs to be investigated. There is a strong need for entrepreneurs in microbusinesses to identify more factors that drives financial innovation to survive, to grow their business, and to create more jobs for economic growth. Given the gap in research in the entrepreneurship literature, this directed the need for research at the individual level to extend understanding related to other innovative drives in microbusinesses.

BACKGROUND OF THE STUDY

The background to the problem for this study stemmed from entrepreneurs in microbusinesses need to find new drivers to become innovative to survive and grow with limited resources. Zach (2016) suggested that future research in microbusinesses on the effects of other financial innovation drivers, such as entrepreneurship, needs to be investigated. This study analyzed the relationship between resilience and financial innovation in microbusinesses owners to see if the relationship is strong enough to be considered a potential driver of financial innovation. There are over 687,189 microbusiness owners in Michigan that this study could affect. The subjects in this study were 18 years old or older.

The researcher targeted the sample frame of entrepreneurs who rent space inside a collaborative social environment with several other entrepreneurs who oversee different types of a microbusiness. Collaborative workspaces give microbusiness owners with limited resources the opportunity to collaborate and innovate with each other for no additional cost. Bristow& Healy (2017) argued that the more lucrative microbusinesses are, the more innovative they were to bounce back from crisis. Their argument revealed a strong need for entrepreneurs in microbusinesses with limited resources to find new drivers to become more innovative to survive and grow.

PURPOSE OF THE STUDY

The purpose of this quantitative correlational study is to determine if and to what extent there is a relationship between resilience and financial innovation in the microeconomics business market in the state of Michigan in the United States. The research design is a correlational analysis, and the geographic location in Detroit, Michigan in the United States. The target population is owners of microbusinesses in coworking spaces. The relationship between the two variables for this study was the independent variable resilience and the dependent variable financial innovation. Connor and Davidson (2003) define resilience as the embodiment of personal qualities that enable one to thrive in the face of adversity.

There are five factors of resilience that reveal the personal qualities it embodies. The five factors of resilience make up the 25 questions that accurately measure resilience. The first factor is personal competence (8 questions) which is a set of skills that includes self-awareness, self-management, tenacity, setting high standards, and responsible decision-making. The second-factor trust (7 questions) deals with individual ability to put confidence in his/her instincts, tolerance of negative affect, and strengthening effects of stress. The third-factor positive acceptance of the change (5 questions) which is an individual's ability to accept things as they are, to secure relationships, and to persevere in any environment. The fourth-factor control (3 questions) deals with an individual's ability to influences his/her internal states such as emotional control and self-control. The fifth-factor spiritual influence (2 questions) deals with an individual's ability to sustain a sense of self and purpose through a set of beliefs, principles, or values.

Entrepreneur resilience is needed for financial innovation in microbusinesses to prevail, yet there is not much empirical literature analyzing their relationship. Resilience and financial innovation are both argued to be critical drivers of a firm's success (Zach (2016), Fisher, Maritz, & Lobo, (2016). However, there is limited empirical evidence on the relationship between resilience and financial innovation in microbusiness (Roper, Hewitt-Dundas, 2017 & Bristow, Healy, 2017). The researcher addressed this problem to assess the relationship between resilience and financial innovation in the microeconomics business market in the state of Michigan in the United States.

Identifying the relationship between these two variables resilience and financial innovation will help entrepreneurs in microbusinesses cope with their challenges and grow their business by focusing more on innovative drivers. The resilience theory by Connor & Davidson (2003) is reliable and has an excellent scale for measuring these two variables.

RESEARCH QUESTIONS AND/OR HYPOTHESES

The following are the variables and the description for each: the predictive variable is resilience. The criterion variables are the levels of financial innovation. The sub-variables of resilience interrelated components are personal competency, acceptance of change, trust, control, and spiritual influence. The sub-variables for financial innovation are the individual, the leader, workgroup, and climate for financial innovation. The independent variable is resilience, and the dependent variable is financial innovation.
The following are the research questions and hypothesis:

RQ1: *To what extent does resilience (personal competency, acceptance of change, trust, control, spiritual influence) correlate the level of financial innovation in microbusinesses in the state of Michigan in the United States?*

H10: *There is no significant correlation between the personal competency, acceptance of change, trust, control, spiritual influence (average of the scores on the five resilience), and the level of financial innovation in the state of Michigan in the United States.*

H1a: *There is a significant correlation between personal competency, acceptance of change, trust, control, spiritual influence (average of the scores on the five resilience), and the level of financial innovation in the state of Michigan in the United States.*

RQ2: *To what extent does personal competency correlate the influence of the level of financial innovation within microbusinesses in the state of Michigan in the United States?*

H20: *There is no significant correlation between personal competency and the level of financial innovation in the state of Michigan in the United States.*

H2a: *There is a significant correlation between personal competency and the level of financial innovation in the state of Michigan in the United States.*

RQ3: *To what extent does acceptance of change correlate the level of financial innovation within microbusinesses in the state of Michigan in the United States?*

H30: *There is no significant correlation between the acceptance of change and the level of financial innovation in the state of Michigan in the United States.*

H3a: *There is a significant correlation between the acceptance of change and the level of financial innovation in the state of Michigan in the United States.*

RQ4: *To what extent does trust correlate the influence of the level of financial innovation within microbusinesses in the state of Michigan in the United States?*

H40: *There is no significant correlation between trust and the level of financial innovation in the state of Michigan in the United States.*

H4a: *There is a significant correlation between trust and the level of financial innovation in the state of Michigan in the United States.*

RQ5: *To what extent does control correlate the level of financial innovation within microbusinesses in the state of Michigan in the United States?*

H50: *There is no significant correlation between control and the level of financial innovation in the state of Michigan in the United States.*

H5a: *There is a significant correlation between control and the level of financial innovation in the state of Michigan in the United States.*

RQ6: *To what extent does spiritual influence correlate the level of financial innovation within microbusinesses in the state of Michigan in the United States?*

H60: *There is no significant correlation between spiritual influence and the level of financial innovation in the state of Michigan in the United States.*

H6a: *There is a significant correlation between spiritual influence and the level of financial innovation in the state of Michigan in the United States.*

The research questions in the study are relevant to the problem's microbusiness owners face while striving to grow their business. The relationship between resilience and financial innovation lacks in the empirical literature, especially in microbusinesses (Roper & Dundas, 2017). This research will help microbusiness owners gain insight to make more informed decisions to survive the hardships of entrepreneurship and grow their business. Moreover, this research will help new microbusiness owners consider starting their business in inexpensive collaborative environments, which could help them collaborate with other business owners to grow their business.

More and more retail stores are closing due to internet sales that are skyrocketing (Berman, 2019). Successful web-based retailers (mainly Amazon) are making it harder for small businesses and microbusinesses to survive and grow without being innovative. Large retail chains such as Gap, J.C. Penney, and Payless, to name a few, are rapidly closing and leading individuals to freelance work and entrepreneurship (Berman, 2019). This study adds value to entrepreneurs and extends the entrepreneurship literature by analyzing the relationship between resilience and financial innovation in microbusiness.

In conclusion, the study will assist entrepreneurs with a different perspective to overcome the struggles that most entrepreneurs face daily and their lack of resources. Business success has always escalated through collaboration, teamwork, and external help. Today, microbusiness owners need new innovative ways to penetrate the market to help their businesses grow and survive.

RESEARCH DESIGN

This study research design uses a correlational design because it examines the relationship between two variables. The correlational studies aim to establish whether two or more variables are related (Bold, 2001). Chen (2012) stated that a correlational design determines if there is a relationship between two variables. Therefore, a correlational research design was selected for this study to explore if there is a relationship between the variable's resilience and financial innovation.

The target population studied are presidents in microbusinesses in Detroit, Michigan. One hundred fifty-five entrepreneurs own a microbusiness in collaborative workspaces in TechTown Junction 440 in Detroit, Michigan. The director will be sent an email with a survey attached with a consent form on the front page to send out to every microbusiness owner renting space at TechTown Junction 440. According to G Power, there is a need to obtain a minimum of 84 surveys completed accurately to satisfy G power qualifications. The two instruments that will be used are the Connor Davison Resilience Scale – Connor Davison (2003) and the Climate for Financial innovation Scale – Scott and Bruce, (1994), which stems from our theoretical foundation. This led the researcher to the problem to what extent, if any there is a relationship between resilience and financial innovation in the microeconomics business market in the state of Michigan in the United States. The unit of observations will be entrepreneurs in a collaborative workspace.

DATA ANALYSIS PROCEDURES

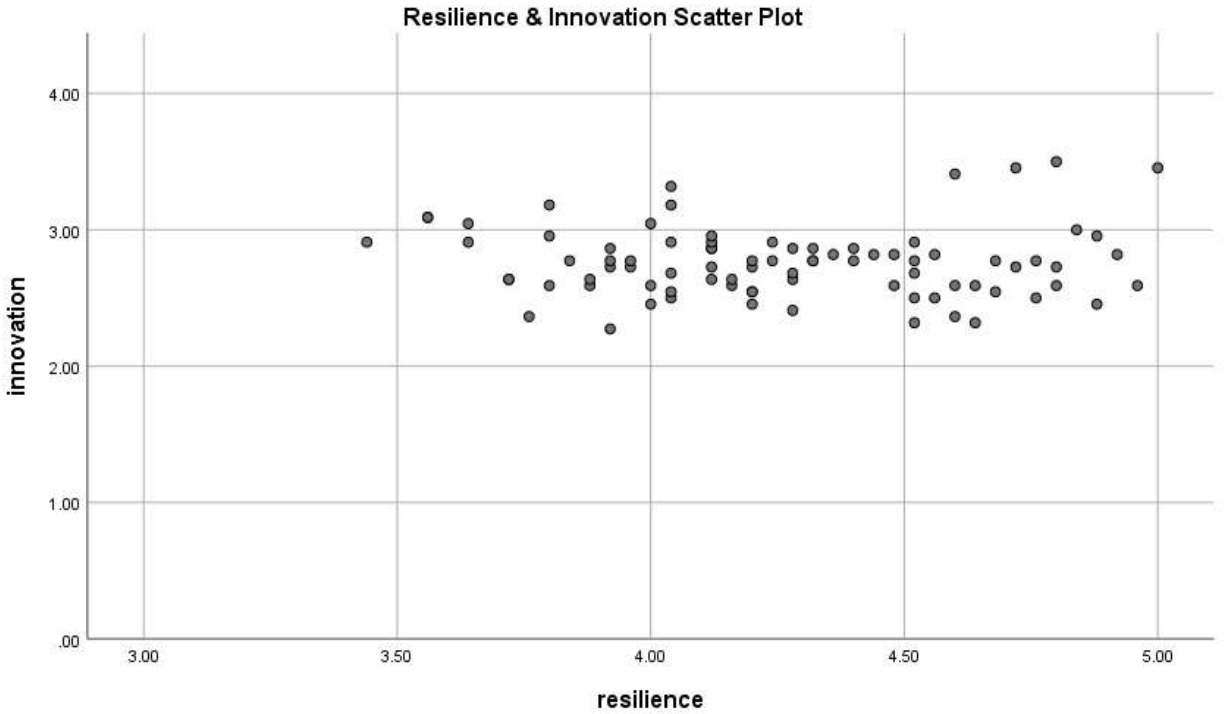
The purpose of this study is to determine if and to what extent there is a relationship between resilience and financial innovation in microeconomics business market in the state of Michigan in the United States. The geographic location was Detroit, Michigan. Participants were owners of microbusinesses renting coworking spaces in Junction 440 TechTown Detroit, Michigan who completed the informed consent along with the survey. The unit of analysis was the entrepreneur. The researcher applied a correlational design to determine the relationship between the two variables' resilience and financial innovation. The two instruments that collected the data were validated to obtain data from entrepreneurs. All data was collected at the individual level. Pearson's correlation was attempted with a sample size of 84.

TEST OF ASSUMPTIONS

Pearson's correlation has five assumptions that the researcher dataset must pass to be used to give valid results: 1) two continuous variables 2) two continuous variables being paired 3) a linear relationship between the two variables 4) no significant outliers and 5) data is normally distributed (Laerd Statistics, 2017).

The researcher's step-by-step process on how each assumption was met. The first and second assumptions the researcher reviewed the two variables which are continuous ratio and were measured on interval scales. Therefore, the first assumption and the second assumptions were met. The researcher created a scatterplot to determine if there was a linear relationship in Figure 1. The third assumption was met and shows a legitimate straight line in Figure 1. Assumption four was met because there were no significant outliers in the data. The researcher used a boxplot to find outliers and removed two outliers from the study found in Figure 1.

FIGURE 1
SCATTERPLOT FOR LINEARITY ASSUMPTION & BOXPLOTS FOR OUTLIERS



Data Source: Compiled by Author

Also, univariate outliers were examined for resilience and financial innovation. An outlier was defined as any value which falls outside the range of +/- 3.29 standard deviations from the mean (Tabachnick & Fidell, 2013). There were no outliers present in resilience or financial innovation. Figure 1 presents the number of outliers in each variable (Table 1). However, assumption five was not met. Not all variables were normally distributed, as assessed by Shapiro-Wilk's test and the Kolmogorov-Smirnov(K-S) test ($p < .05$) (Table 2).

TABLE 1
SAMPLE DEMOGRAPHICS

Variable	Frequency	Percentage
Gender		
Female	48	57.1
Male	36	42.9
Age		
18-24	5	6.0
25-34	30	35.7
35-44	29	34.5
45-54	15	17.8
55-64	5	6.0
Ethnicity		
White or Caucasian	15	17.9
Black or African American	61	72.6
Hispanic or Latino American	1	1.2
Asian or Asian America	2	2.4
Another race	5	6.0

Note. N=84
Data Source: Compiled by Author

Considering the fifth assumption violation the researcher changed the analysis to a non-parametric test instead of the Pearson's correlation. Spearman's correlation was selected due to the fact it obtains valid results when its assumption is met (Laerd Statistics, 2017).

TABLE 2
RELIABILITY COEFFICIENT FOR THE CLIMATE FOR INNOVATION INSTRUMENT

Instrument	Obtained Cronbach's Alpha	Typical Cronbach's Alpha	N of items
Climate for Innovation	.731	.756	22

Data Source: Compiled by Author

The researcher tested the Spearman's correlation three assumptions. 1) there are two continuous or ordinal variables 2) two variables being paired and 3) a monotonic relationship between two variables (Laerd Statistics, 2017). The first two assumptions were met as previously discussed when attempting to run the Pearson's correlations. However, the third and final assumption was hard for the researcher to tell if the scatter plot was monotonic when combined with the five components of resilience. Nevertheless, the two variables scatterplot showed a monotonic relationship (Appendix A.). Therefore, the researcher analyzed the data using Spearman's correlational analysis.

To answer the research questions along with the hypotheses the Spearman's correlation was used to analyze the DC-RISC and the Individual innovative instrument to examine the relationship between the

variables. The researcher used a convenience sampling strategy as well as to recruit from the target population. A convenience sample is a type of non-probability sampling that involves the sample being drawn from that part of the population that is selected because it is readily available and convenient (Boslaugh, 2013).

The researcher used the G*Power calculator to compute the sample size for the correlational research design with five predictors, for the .95 typical minimum power, and the minimum .80 at a significance level of .008. The G*Power output reveals a minimum sample size of 84. When the input included an expected medium effect size equaled .30. the standard level of statistical significance, alpha equaled .008, and minimum power .80. This brought the minimum sample size to 130.

The Bonferroni Correction is often used in statistics to reduce the probability of a type 1 error when testing multiple hypotheses. By conducting six separate tests, one introduces the potential for Type I errors, which must be corrected by adjusting the level of significance. A simple method of conducting an alpha adjustment is the Bonferroni alpha correction, which is αcorrected = α/k, where k is the number of hypotheses tested. Therefore, α = .05/6 = .008. However, when the level of significance was adjusted to alpha error 0.008 in the G*Power the total sample size was changed to 130. The Post hoc power analysis for resilience and financial innovation effect size: 1-β = .13. The Post hoc power analysis for each of the five components of resilience is as follows Personal Competency 1-β = .098, Trust 1-β = .050, Acceptance of Change 1-β =.051, Control 1-β = .185, and spiritual influence 1-β = .517.

The relationship between the two variables for this study was the independent variable resilience and the dependent variable financial innovation. Connor and Davidson (2003) define resilience as the embodiment of personal qualities that enable one to thrive in the face of adversity. De Ven et al. (2000) defines financial innovation as the introduction of a new idea that brings value to the company. Table 3 reveals the results of Spearman's rho Correlation with all five components of resilience (Table 1.). The five components are personal competencies, trust, acceptance of change, control, and spiritual influence.

The first component, personal competencies is the ability to direct oneself in a chosen direction, to cope with problems effectively, and to adapt quickly when changes occur (American Psychological Association, 2020). It is a set of skills that includes self-awareness, self-management, tenacity, setting high standards, and responsible decision-making. The second component, trust is an individual's ability to put confidence in his/her instincts, tolerance of negative affect, and strengthening effects of stress. The third component, acceptance of change is an individual's ability to embrace change despite being uncomfortable. It is accepting things as they are, securing relationships, and persevering in any environment. The fourth component, control is an individual's ability to influence his/her internal state such as emotional control and self-control. The fifth component, spiritual influence is an individual's ability to sustain a sense of self and purpose through a set of beliefs, principles, or values.

The first way to interpret the Spearman's rho correlation is to understand the Spearman's rank-order correlation coefficient (r_s or ρ) measure the strength and direction of the association between two variables (Laerd Statistics, 2017). The correlation coefficient can take values from +1 to -1 which reveals a perfect positive relationship (+1) or negative (-1). If the two variables have a correlation coefficient of zero this means there is no significant relationship between the two variables. All of the five components of resilience acceptance, trust, competence, and control have no significant relationship, but spiritual influence .218 had a weak negative correlation.

The second and final way to interpret the Spearman's rho correlation is to determine whether the two variables are statistically significant. To determine this set α = 0.008 (i.e., $p < .008$) the p-value must be lower than .008, in other words, there must be less than an 8% chance that the strength of the two variables relationship happen by chance if the null hypothesis were true. The first four components of resilience acceptance of change, trust, personal competence, and control have no statistical significance therefore, we cannot reject the null hypothesis and cannot accept the alternative hypothesis. However, spiritual influence does have a statistical significance and the results reject the null hypothesis and accept the alternative hypothesis. This means the researcher accepts that there is no significant correlation between spiritual influence and the level of financial innovation in the state of Michigan in the United States. The higher the level of spiritual influence the lower the level of financial innovation (Table 3).

TABLE 3
SPEARMAN'S RHO CORRELATION RESULTS

Variable		Acceptance	Trust	Change	Control	Spiritual	Innovation
Acceptance	Rs	1.000	.472	.643	.212	-.088	
	p-value		.000	.000	.000	.052	.424
Trust	Rs	.629	1.000	.585	.445	.315	-.006
	p-value	.000		.000	.000	.004	.959
Change	Rs	.472	.585	1.000	.508	.261	-.014
	p-value	.000	.000		0.000	.016	.898
Control	Rs	.643	.445	.508	1.000	.256	-.163
	p-value	.000	.000	.000		.019	.138
Spiritual	Rs	.212	.315	.261	.256	1.000	-.218
	p-value	.052	.004	.016	.019		.046
Innovation	Rs	-.088	-.006	-.006	-.014	-.218	1.000
	p-value	.424	.959	.898	.138	.046	

Note. *N*=84
Data Source: Compiled by Author

RESEARCH FINDINGS AND DISCUSSION

The purpose of this study is to determine if and to what extent there is a relationship between resilience and financial innovation in microeconomics business market in the state of Michigan in the United States. The six research questions that drove this research focused on resilience (five components) and financial innovation for each entrepreneur. To answer each question, the research used Spearman's rho correlation analysis.

The two validated instruments used for this study were the Connor and Davis Resilience instrument (2003) and the Climate for Financial innovation instrument (1994). 84 candidates answered questions from an online survey produced from these two instruments. Due to the assumption's violation of the parametric Pearson's correlation, the nonparametric Spearman's rho correlation was used. Spearman's rho can take values from +1 to -1, which indicates a perfect positive (+1) or negative (-1) relationship. The closer Spearman's rho is to zero, the weaker the relationship, and the closer Spearman's rho is to +1 or -1, the stronger the relationship (Laerd Statistics, 2017). Per the analysis, there was no significant relationship between four components (acceptance of change, trust, change, and control) of resilience and financial innovation. Spiritual influence and financial innovation were correlated, $\rho = -.218$, $p = .046$. The results are presented in Table 4.

TABLE 4
SPEARMAN RANK-ORDER CORRELATION ANALYSIS

Variable	Resilience	Innovation
Resilience Correlation Coefficient	1.000	-.089
p-value		.422
Innovation Correlation Coefficient	-.089	1.000
p-value	.422	

Note. N=84
Data Source: Compiled by Author

Research Question 1

The first question asked: To what extent does resilience (personal competency, acceptance of change, trust, control, spiritual influence) correlate the level of financial innovation in microbusinesses in the state

of Michigan in the United States? The results of the Spearman's correlation analysis revealed there was no significant relationship between the first four (Personal Competency r_s = -.088, p =.424; Trust r_s = -.006, p =.959; Acceptance of Change r_s = -.012, p =.878; Control r_s = -.117, p =.154;) and financial innovation. However, there was a significant statistical relationship between Spiritual Influence (r_s = -.218, p =.046) and financial innovation. Therefore, the results fail to reject the null hypothesis and cannot accept the alternative hypothesis because there is no significant correlation between personal competency, acceptance of change, trust, control, spiritual influence, and the level of financial innovation in the state of Michigan in the United States. The results in this study do not align with previous research (Bristow & Healy, 2017; Sameer, 2018). Previous research found that there was a significant statistical relationship between resilience and financial innovation.

Resilience and financial innovation are both argued to be critical drivers of a firm's success (Zach, 2016; Fisher, Maritz, & Lobo, 2016). Although there is a lack of research between resilience and financial innovation especially in microbusinesses some researcher's results showed resilience predated innovative work behavior. Sameer (2018) study reveals resilience predicts innovative behavior in her study. The purpose of her study was to examine the link between positive psychological capital (resilience is a component) and innovative behavior amongst employees. This research sought to answer this question about resilience and innovative behavior amongst microbusiness owners to further entrepreneurship literature and the relationship between resilience and financial innovation.

According to Bristow & Healy (2017), the relationship between resilience and financial innovation in microbusinesses is not yet sufficiently defined. He argued that the more lucrative microbusinesses are, the more innovative they were to bounce back from crisis. Therefore, this study focused on microbusiness owners who rented collaborative workspaces to examine the relationship between resilience and financial innovation to see if Bristow & Healy, (2017) results held in collaborative workspaces. There appears to be no significant correlation between microbusiness owner's relationship to resilience and financial innovation.

Research Question 2

The second question asked: To what extent does personal competency correlate the influence of the level of financial innovation within microbusinesses in the state of Michigan in the United States? The results of the Spearman's correlation analysis revealed there is no significant relationship between Personal Competency and financial innovation: (Personal Competency r_s = -.088, p =.424). Therefore, the results fail to reject the null hypothesis and cannot accept the alternative hypothesis because there is no significant correlation between the personal competency and the level of financial innovation in the state of Michigan in the United States. The results of the Spearman's correlation analysis revealed there was no significant relationship between Personal Competency and financial innovation: (Personal Competency rs = -.088, p =.424). The results of this study do not align with previous research (Mohammadkazemi, Rasekh, & Navid, 2016; Sa'ari, 2013; Mugerwa 2013).

According to Mohammadkazemi et al. (2016) study revealed there is a positive and significant relationship between personal competency and financial innovation. The authors' article was similar to this research focusing on entrepreneurial competencies that involve, "characteristics and abilities related to the creation of a new, sustainable, and growing business (p.57)." Aris et al. (2019) revealed there is a relationship between intrapreneurial competencies and innovative work behaviors. These authors research revealed personal competency tends to innovate, seek opportunities, and initiate changes. Christensen (2005) article on financial innovation exposed to the lack of research on personal competency and financial innovation. Although, the findings from the study are inconsistent and suggest that personal competency and financial innovation have a relationship it is obvious to see that the lack of research in microbusinesses is playing a strong factor. Nevertheless, based on the inferential statistics data it revealed that there was no significant relationship between resilience and the level of financial innovation within microbusinesses in the state of Michigan in the United States.

Research Question 3

The third question asked: To what extent does acceptance of change correlate the level of financial innovation within microbusinesses in the state of Michigan in the United States? The results of the Spearman's correlation analysis revealed there was there is no significant relationship between acceptance of change and financial innovation: (acceptance of change r_s = -.014, p =.898). Therefore, the results fail to reject the null hypothesis and cannot accept the alternative hypothesis because there is no significant correlation between the personal competency and the level of financial innovation in the state of Michigan in the United States. The results of this study do not align with previous research (Moreira, Guimares, & Philippe 2016; Fabio et al. 2016).

According to Moreira, Guimares, and Philippe (2016), change is a stage that takes place before financial innovation can happen. Thus, revealing a strong relationship between the acceptance of change and financial innovation. Poole and Van de Ven (2004) stated financial innovation and change have become widely recognized theoretically as partners. Today, acceptance of change is crucial in the ever-changing business world (Di Fabio & Gori, 2016). However, the findings from the present study were inconsistent with the previously reviewed literature. Nevertheless, based on the mean scores of all five components and the descriptive statistics data it revealed that there are no correlations between resilience and the level of financial innovation within microbusinesses in the state of Michigan in the United States. Thus, there might be a small possibility of other predictor variables that might influence financial innovation.

Research Question 4

The fourth question asked: To what extent does trust correlate the influence of the level of financial innovation within microbusinesses in the state of Michigan in the United States? The results of the Spearman's correlation analysis revealed there was no significant relationship between trust and financial innovation: (trust r_s = -.006, p =.959). Therefore, the results fail to reject the null hypothesis and cannot accept the alternative hypothesis because there is no significant correlation between the personal competency and the level of financial innovation in the state of Michigan in the United States. The results of this study do not align with previous research (Renzl, 2008; Bidault & Castello, 2010).

According to Renzl (2008), trust and financial innovation amongst teams are positively correlated. Bidault and Castello (2010) stated the higher the trust between executives involved, the higher the relational quality between the companies. In other words, the more entrepreneur trusts one another when collaborating the more they can innovate together. Moreover, the researchers stated that joint financial innovation requires another level of trust. Since the sharing of knowledge with other business owners to find better solutions is unlikely to happen without a sufficient level of trust. The authors revealed contracts alone will not help, but in some cases have hidden the innovative flow from entrepreneurs (2010). However, the findings from the present study were inconsistent with the previously reviewed literature. Nevertheless, based on the mean scores of all five components and the descriptive statistics data it revealed that there are no correlations between resilience and the level of financial innovation within microbusinesses in the state of Michigan in the United States. Thus, there might be a small possibility of other predictor variables that might influence financial innovation.

Research Question 5

The fifth question asked: To what extent does control correlate the level of financial innovation within microbusinesses in the state of Michigan in the United States? The results of the Spearman's correlation analysis revealed there was no significant relationship between control and financial innovation: (control r_s = -.163, p =.138). Therefore, the results fail to reject the null hypothesis and cannot accept the alternative hypothesis because there is no significant correlation between the personal competency and the level of financial innovation in the state of Michigan in the United States. The results of this study do not align with previous research (Li et al., 2015; Boone, Brabander, & Witteloostuijn, 1996).

According to Li et al. (2015), financial innovation performance relationships were positive for employees possessing either an internal or an external locus of control. Boone, Brabander, and Witteloostuijn (1996) article revealed that financial innovation facilitates the relationship between

entrepreneurs' control and microbusiness's performance. Some researchers have found that control influences entrepreneurs' behavior to implement financial innovation strategies, introduce new products, and engage in R&D (Miller and Toulouse, 1986, Miller et al., 1982). However, the findings from the present study were inconsistent with the previously reviewed literature. Nevertheless, based on the mean scores of the first four components and the descriptive statistics data it revealed that there are no correlations between resilience and the level of financial innovation within microbusinesses in the state of Michigan in the United States. Thus, there might be a small possibility of other predictor variables that might influence financial innovation.

Research Question 6

The six and final question asked: To what extent does spiritual influence correlate the level of financial innovation within microbusinesses in the state of Michigan in the United States? The results of the Spearman's correlation analysis revealed there was no relationship between spiritual influence and financial innovation with the alpha correction $\alpha = .008$ (spiritual influence $r_s = -.218$, $p = .046$). Therefore, the results reject the null hypothesis and accept the alternative hypothesis. Therefore, the results fail to reject the null hypothesis and cannot accept the alternative hypothesis because there is no significant correlation between the spiritual influence and the level of financial innovation in the state of Michigan in the United States. The results of this study do not align with previous research (Ranasinghe & Samarasinghe, 2019; Pandey, Gupta, & Gupta, 2019).

According to Ranasinghe and Samarasinghe (2019) spirituality leads to increase innovativeness and creativity in the workplace. Pandey, Gupta, and Gupta (2019) revealed spiritual climate has a positive association with team-level innovative behaviors. In other words, spiritual influence has a positive relationship with individual innovative behavior. However, in this study, the findings were inconsistent with previous studies leaving room for more researchers to analyze the relationship between resilience and financial innovation.

This quantitative correlational study aimed to assess the relationship between resilience (five components: personal competency, acceptance of change, trust, control, and spiritual influence) and financial innovation in the microeconomics business market in the state of Michigan in the United States. The six research questions along with their hypothesis drove this research with a focus on the bivariate relationship between resilience (five components: personal competency, acceptance of change, trust, control, and spiritual influence) and financial innovation for the entrepreneur. The unit of analysis was the entrepreneur.

A bivariate correlation analysis was used to answer the six research questions. The two validated instruments used were the Connor and Davis Resilience instrument (2003) and the Climate for Financial innovation instrument (1994). 84 entrepreneurs participated to answer questions from an online survey produced from these two instruments. Due to the assumption's violation of the parametric Pearson's correlation the researcher used the nonparametric Spearman's rho correlation to access the relationship between resilience and financial innovation (Laerd Statistics, 2017).

The first research question variables were resilience (five sub-variables: personal competency, acceptance of change, trust, control, and spiritual influence) and financial innovation.

The results revealed that resilience in microbusiness owners had no impact on the level of financial innovation in their businesses. This means there is not a tendency for resilience to either increase or decrease when the level of financial innovation increases.

The second research question had two variables with personal and financial innovation that revealed there was no significant relationship between Personal Competency and financial innovation: (Personal Competency $r_s = -.088$, $p = .424$). The results revealed that personal competency had no impact on the level of financial innovation. There is not a tendency for personal competency to either increase or decrease when the level of financial innovation increases.

The third research question had two variables with trust and financial innovation. The results of the Spearman's correlation analysis revealed there was no significant relationship between trust and financial innovation: (trust $r_s = -.006$, $p = .959$). The results revealed that trust had no impact on the level of financial

innovation. There is not a tendency for trust to either increase or decrease when the level of financial innovation increases.

The fourth research question had two variables with the acceptance of change and financial innovation. The results of Spearman's correlation analysis revealed there no significant relationship between acceptance of change and financial innovation: (acceptance of change r_s = -.014, p =.898). The results revealed that acceptance of change had no impact on the level of financial innovation. There is not a tendency for acceptance of change to either increase or decrease when the level of financial innovation increases.

The fifth research question had two variables with control and financial innovation. The results of the Spearman's correlation analysis revealed there was no significant relationship between control and financial innovation: (control r_s= -.163, p =.138). The results revealed that control had no impact on the level of financial innovation. There is not a tendency for control to either increase or decrease when the level of financial innovation increases.

The six research question variables were spiritual influence and financial innovation. The results of the Spearman's correlation analysis revealed there was no relationship between spiritual influence and financial innovation with the alpha correction α = .008 (spiritual influence rs = -.218, p =.046). Therefore, the results reject the null hypothesis and accept the alternative hypothesis.

In conclusion, the bivariate analysis performed applying the Spearman's correlation results indicated no statistically no significant relationship with the five components in resilience. Therefore, the researcher cannot reject the null hypothesis and cannot accept the alternative hypothesis. The limitation of the correlational research design is a strong correlation can be misleading because researchers cannot assume cause and effect. The limitation of the data was the limited amount of completed surveys obtained. The limitation to the Spearman's analysis is that there can be a statistical significance between two measures but poor for practical purposes.

SIGNIFICANCE OF THE FINDINGS

The significance of this study was to analyze the relationship between resilience and financial innovation in the microeconomics business market in the state of Michigan in the United States. In this study, the participants answered the question from an electronic survey that addressed financial innovation and the five components of resilience and how they related in a collaborative work environment. Zach (2016) revealed there is a need to find more drivers of financial innovation to help smaller businesses survive and grow their business. Thus, resilience was considered as a driver of financial innovation in this study. Connor and Davidson (2003) revealed the importance of resilience that enables individuals to thrive in the face of adversity. The five components to resilience are personal competence, acceptance of change, trust, control, and spiritual influence. The results from the study may help to gives insight into the relationship between resilience and financial innovation to help entrepreneurs in microbusinesses survive, grow, and to create new jobs for economic growth.

The resilience theory by Connor and Davidson (2003) was the theoretical framework used for the study. Bristow and Healy (2017) stated there is a need for further reflection on the relationships, if any, between the role of financial innovation in resistance and recovery. Thus, resilience five components were used to analyze individual resilience in microbusiness owners in collaborative entrepreneurs' environments. Resilience and financial innovation are both key drivers of microbusinesses' success and survival (Zach, 2016; Fisher, Maritz, & Lobo, 2016). Running a business is a demanding and stressful process creating significant changes in a business owner's life (Yang & Danes, 2015). Thus, microbusiness owners need to figure out better ways to grow their business with limited resources, and resilience could be the unexamined missing key.

The literature review in revealed there is a growing concern about declining United States businesses as entrepreneurship, and economic dynamism has continued to decline in recent years (Hathaway & Litan, 2014, Singh & Ogbolu, 2015). Bonnet, El Harb, & Gazzah, (2017) suggested stimulating microbusinesses creation should be considered to spur economic development in disadvantaged regions. The last few years the southeastern region in Michigan has promoted collaborative workspaces for entrepreneurs with

microbusinesses to help them grow their business, to survive, and to turn its economy around (Woods, 2017). The study identified, based on inferential statistics, that there was no significant relationship between resilience and financial innovation. The five components of resilience (acceptance of change, trust, change, control, and spiritual influence) were not statistically significant .424, .959, .889, .138 and .046 with $p > .008$. The results are presented in Table 3. To validate the correlation additional research with a larger sample size would be needed. Although the descriptive statistics data revealed there is no significant relationship between resilience and financial innovation within microbusinesses in the state of Michigan in the United States, there is a possibility that other predictor variables have the chance to significantly affect each principle. Thus, there is a need for further research to identify potential predictors of resilience and financial innovation relationships in the state of Michigan in the United States.

IMPLICATIONS

Theoretical Implications

The resilience theory by Connor and Davidson (2003) provided microbusiness owners with an effective framework to analyze the relationship between resilience and financial innovation. The five components personal competence, acceptance of change, trust, control, and spiritual influence is the most commonly used to access resilience amongst adults (Friborg, Hjemdal, Rosenvinge, & Martinussen, 2003). Fatoki (2018) study examining entrepreneurs in South Africa suggested that resilience is positively linked to financial innovation which would help them survive and grow their business. Thus, resilience and financial innovation would have a strong relationship with microbusiness owners.

The results of this study, based on the descriptive statistics, revealed that there was no significant relationship between resilience and financial innovation. The five components of resilience (acceptance of change, trust, change, and control) were not statistically significant with the level of financial innovation. The results are presented in Table 3. These results were not aligned with prior research findings. To validate the correlation further research with another variable could help.

The major limitation of this study was the number of participants that we were able to get to respond and complete the survey. Unfortunately, the study sample should have been a minimum sample size at 130 participants needed to clear .008 power in the correlational analysis, yet only 84 participants completed the survey. The study convenience sample is generalizability but still limited to the small sample size. A larger survey sample could have helped us to get more participation and a more valid perspective on the relationship between entrepreneur resilience and financial innovation.

The strength of this study is the high response of seasoned microbusiness owners with 10 or more years of experience. Out of the 84 participants 23 of them were entrepreneurs working in their current field for 10 or more years. Additionally, over 40% of participants were educated and had a bachelor's degree while over 20% had a master's degree. Last but not least, the service industry covered close to 40% of the participants in the survey for this study.

The weakness of this study first, the number of participants that we were able to get to respond and complete the survey was limited. A more extensive survey sample could have helped us to get more participation and a more valid perspective on the relationship between resilience and financial innovation. Second, participants' difference is experience, and levels of education presented limitation due to data collection correctness. This might have caused some participants to have a harder time understanding the question while others were able to grasp the question with ease. Third, the lack of funding limited the scope of this research. Therefore, steps were taken to counteract the study to avoid limitations such as using a simple yet valid scale, questionnaires, and giving reasonable time to complete the survey.

Practical Implications

The results of this study could be beneficial to microbusiness owners as they strive to survive and grow their business. Additionally, the results of this study may benefit entrepreneurs that rent space in collaborative work environments by given them more insight into resilience and financial innovation. Although there was no significant correlation between resilience and financial innovation microbusiness

owners in collaborative workspaces could examine the different components of resilience to make sure they are not overextended in any of them which could hinder their company from being more innovative. For example, Detroit is known for its faith-based communities. Many entrepreneurs throughout the city are connected in some way with a local pastor and congregation. Moreover, many pastors, deacons, and ministers are entrepreneurs themselves. Many entrepreneurs believe that their faith in God will help their businesses thrive. This study will help them reexamine their faith (their spiritual influence) in God on their business based on the results of this study. The practical implications suggest that microbusiness owners need to reexamine how they view their resilience. Is it a hindrance to them becoming or innovative or do they just need to make small adjustments to become more innovative while being resilient? The results from this study are not aligned with previous literature, however, there is a lack of empirical literature on microbusiness owners. Nevertheless, additional research with a larger sample size will be needed to validate these claims.

Future Implication

In this study, the researcher analyzed the relationship between financial innovation and resilience (five components) within microbusiness in the state of Michigan. The researcher did not find a significant relationship between the five components of resilience and financial innovation using Kendall's tau-b analysis. Further research should be considered to validate this correlation. Additionally, these results reveal entrepreneurs in the city of Detroit are resilient and innovative, but one does not have anything to do with the other. Thus, an individual must acknowledge the importance of both variables to survive and grow their business.

Although none of the components of resilience had a relationship with financial innovation, spiritual influence and financial innovation came close to having a significant relationship which did spark some interest. Thus, microbusinesses owners can use these results when considering new strategies to become more innovative in their company with scarce resources. Some entrepreneurs might have taken their spiritual walk with the Lord for granted, but after seeing these results could decide to strengthen their faith which could impact their business. Additionally, the results could help entrepreneurs grow their business and cope more with stress now that they can zero in on the component of resilience (spiritual influence) that was the closest to having a significant relationship with resilience. Lastly, because of the low sample size, the assumption violations, and the lack of statistical significance, the population could be expanded to include other cities in Michigan. This alone would increase the response rates, improve the analytical power, and help validate the study's findings.

This interaction he believes would provide more insight into better opportunities for entrepreneurs, more benefits to communities around these potential opportunities, and mutual adjustment based on the two. Therefore, our research on entrepreneur's resilience about growth took a further unique strength through Shepard's (2015) article to use entrepreneurs in coworking spaces in the city of Detroit, Michigan to fill this interaction gap in the literature, which will be discussed further in the section on coworking spaces.

RECOMMENDATIONS

Based on this study and its results, the following recommendation was made by the researcher. The recommendations were motivated by future practices and possible future research. The researcher's result from this conducted study inspired each recommendation made.

Recommendations for Future Research

This research analyzed if and to what extent a relationship existed between resilience and financial innovation in the microeconomics business market in the state of Michigan in the United States. Based on the results of Kendall's tau-b analysis there are serval opportunities to extend this research. First, the researcher would suggest using Connor-Davidson Resilience Scale 10 (CD-RISC) to analyze resilience and financial innovation. This scale measures resilience using hardiness, resourcefulness, and optimism. and its

three components. Fatoki (2018) study investigated the relationship between entrepreneurial resilience and the success of SMEs in South Africa using this scale. Future research might be able to give insight into different components of resilience and financial innovation in microbusiness.

Recommendations for Future Practice

For future practices, individuals should focus on spiritual influence as it relates to financial innovation in microbusinesses. As a result, this research study found a negative correlation between spiritual influence and financial innovation in microbusinesses along with no statistically significant relationships with Kendall's tau-b correlation analysis.

CONCLUSION

Finally, individuals could examine spiritual influence affects the microbusiness itself. David, Kent, and Patricia (2011) stated spirituality is an important part of most American's live. The annual Gallup polls revealed 90% of Americans reported a "belief in God," and roughly 70% reported they were connected to some type of religious community. This study highlights spiritual influence significance to small business and should be considered by microbusinesses moving forward in future research. Thus, a microbusiness owner may use this information to look deeper into spiritual influence to survive and grow their business.

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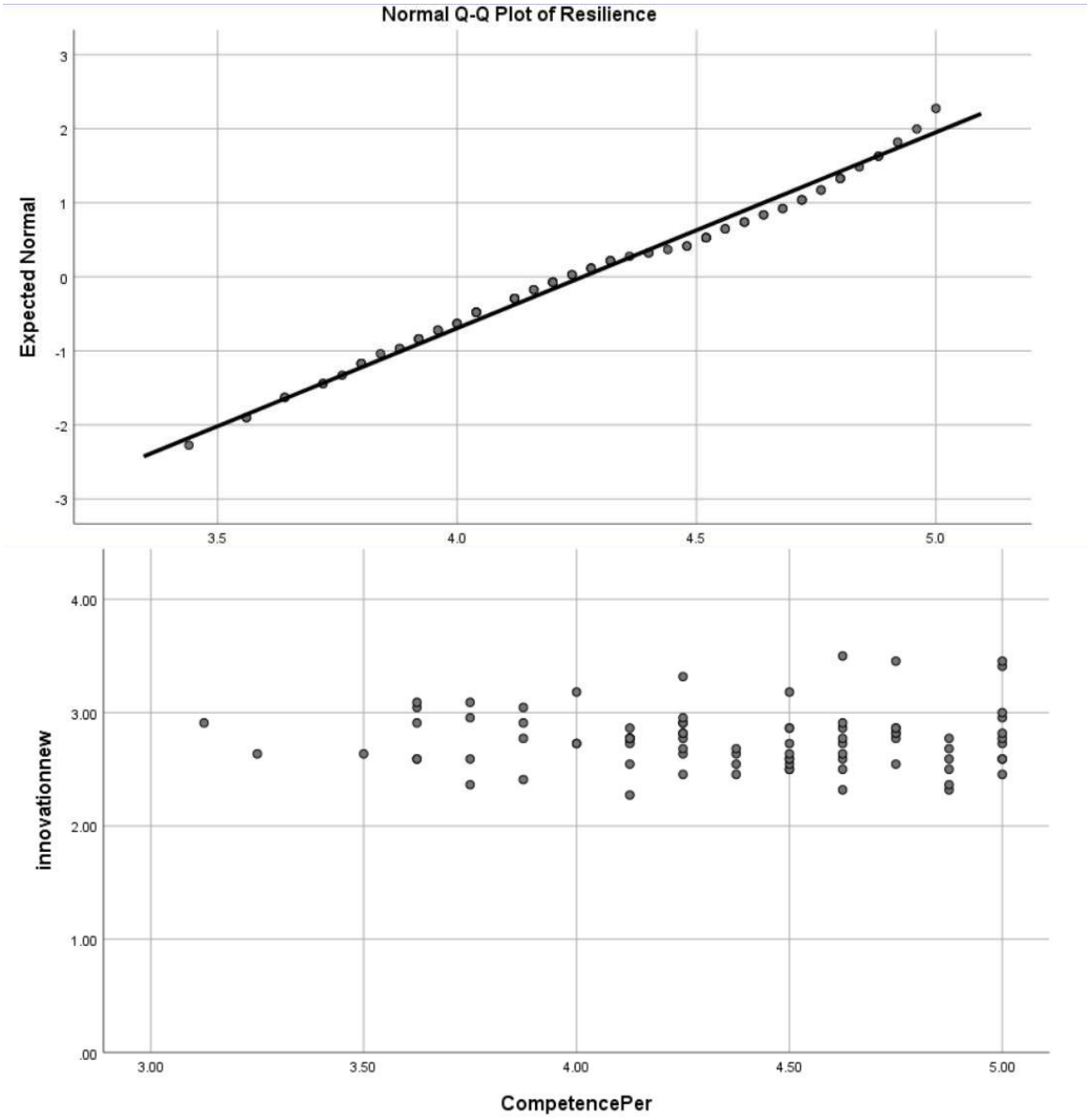
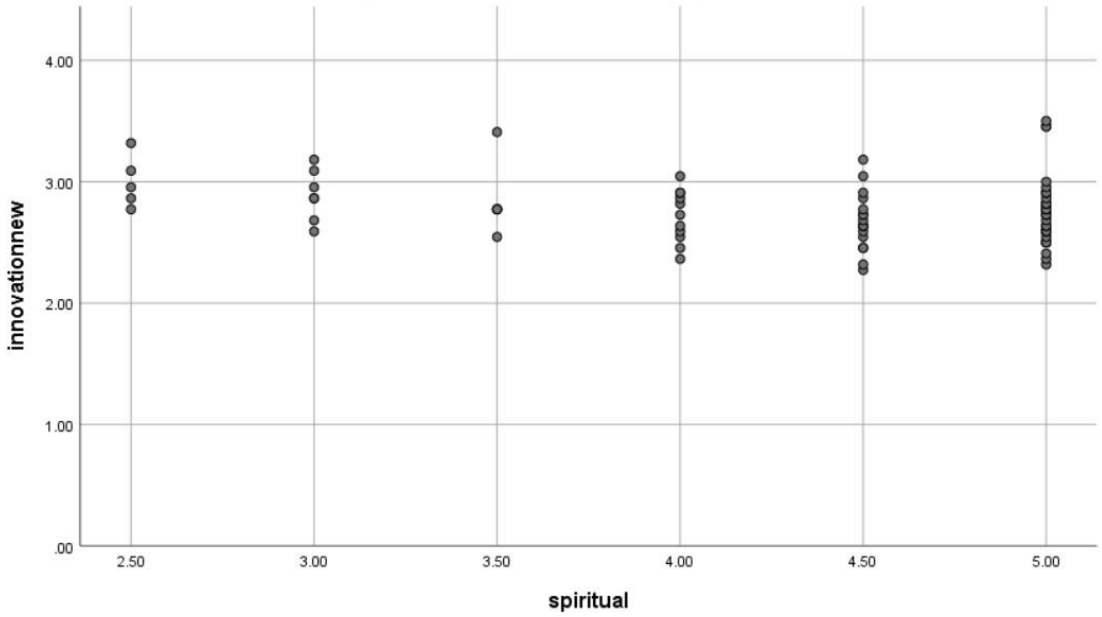
APPENDIX A
TEST OF NORMALITY AND Q-Q PLOTS

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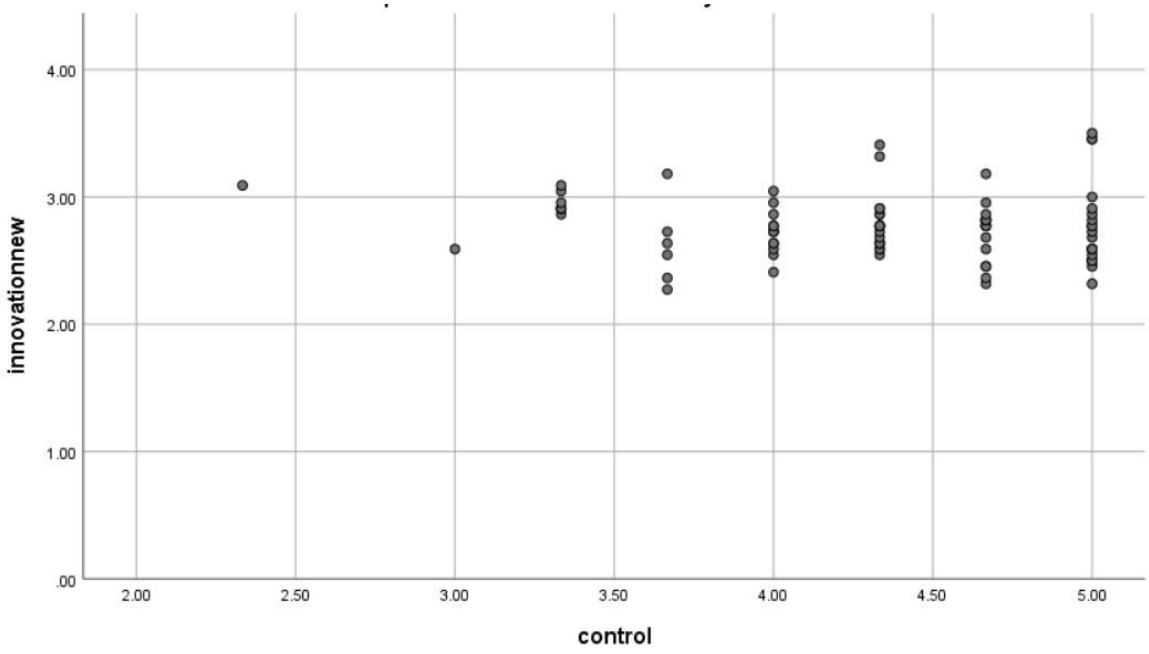
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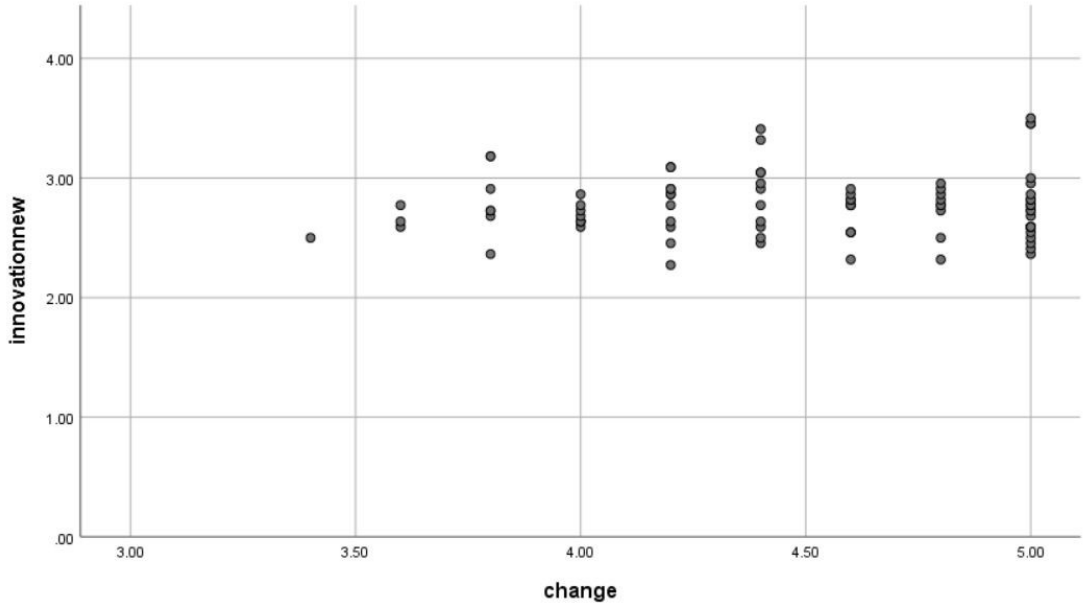
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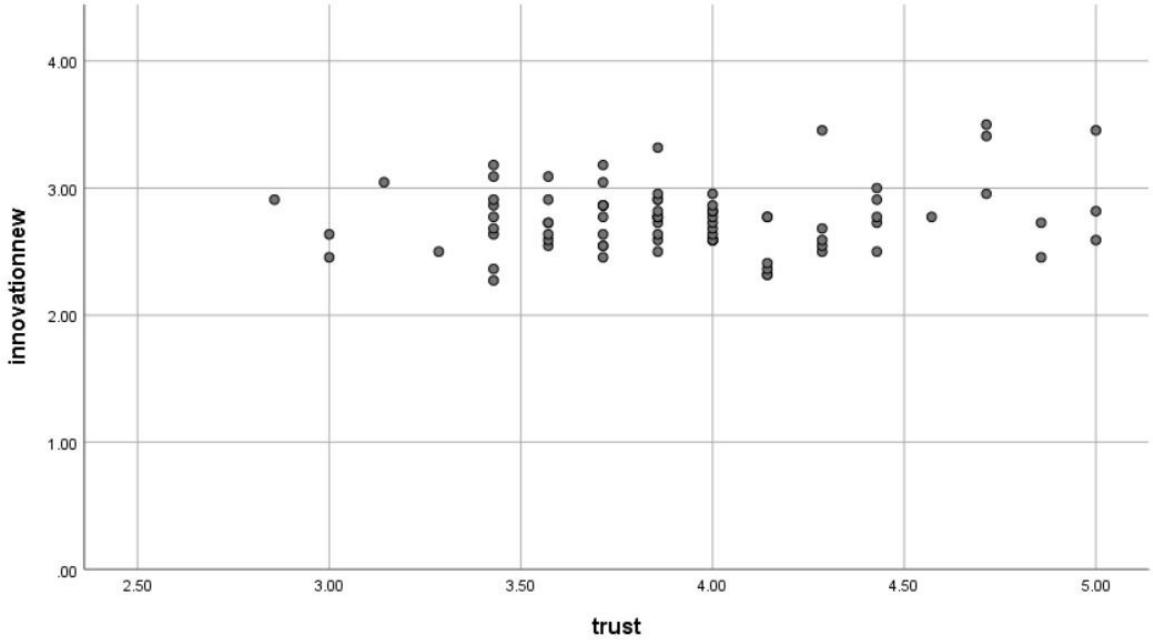
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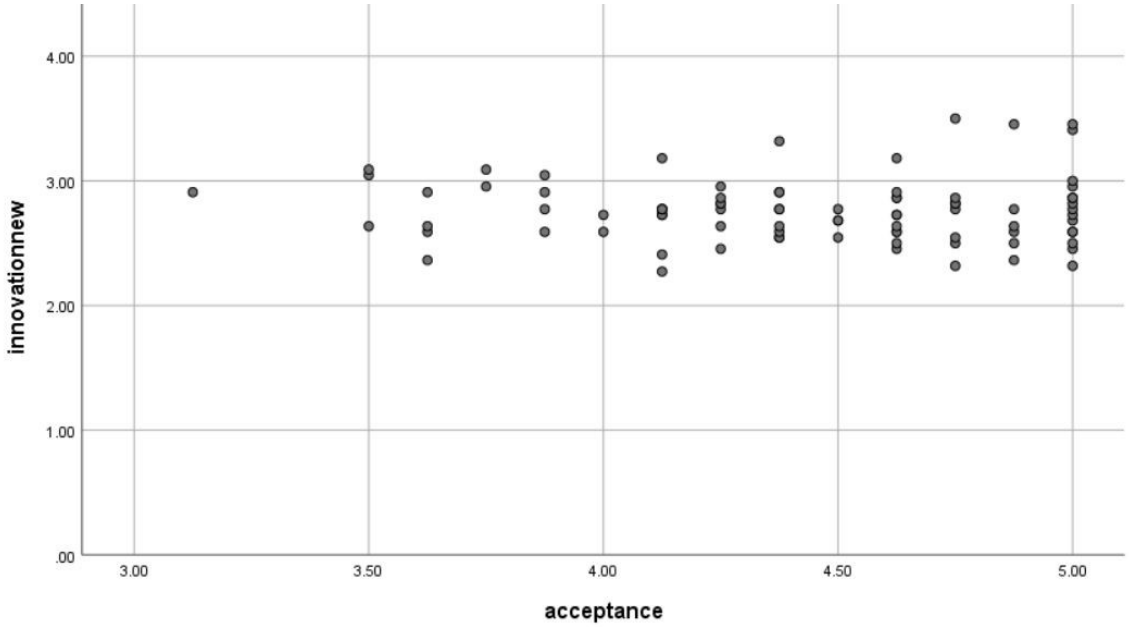

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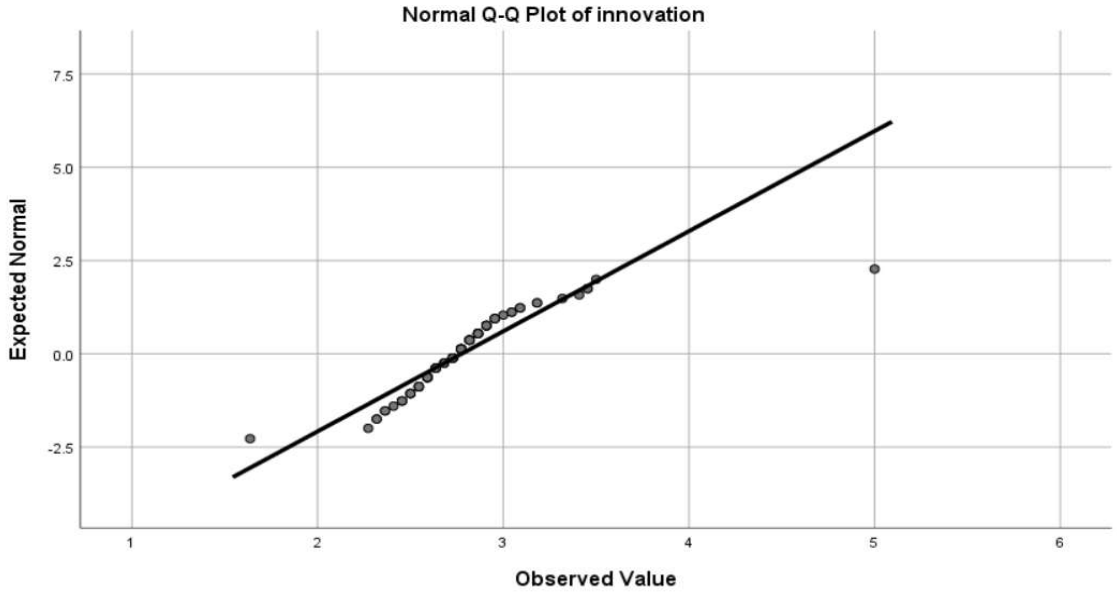

Data Source: Compiled by Author