

**THE RELATIONSHIP OF SOCIAL CAPITAL, SUPPLY CHAIN INTEGRATION
IMPLEMENTATION AND CUSTOMER LOYALTY, AND THEIR RELATIONSHIP TO
FIRM PERFORMANCE**

by

Rickey L. Mask Jr.

ANDREW BORCHERS, DBA, Faculty Mentor and Chair

CRYSTAL NEUMANN, DBA, Committee Member

DONALD JESS, DBA, Committee Member

Rhonda Capron, EdD, Dean

School of Business and Technology

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Business Administration

Capella University

March 2018

ProQuest Number: 10790065

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 10790065

Published by ProQuest LLC (2018). Copyright of the Dissertation is held by the Author.

All rights reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC.
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 – 1346

© Rickey L. Mask Jr. 2018

Abstract

Physical retail locations have existed since the emergence of commerce and trade. Today these physical locations exist in the form of large, brick-and-mortar retail spaces. These locations currently are suffering substantial losses throughout their business structure. The customer experience and customer loyalty trends of past decades are changing. The adaptability of processes of each retail firm is being tested against the giant that has become e-commerce. To address the specific problem of financial loss due to lessening customer loyalty within brick-and-mortar retail firms, this study identifies a common variable from supplier to consumer. This variable exists within the retail firms and their supply chains of the Northeastern United States. The common variable that was identified was social capital, as this variable proves to be significant from supply chain all the way to the consumer. Retail firms and consumers within the Northeast were chosen as the diversity of cultures and population density were ideal to provide the 405 participant population in this study. The study utilized an explanatory, quantitative study utilizing inferential statistics and was designed to examine the relationships between social capital, supply chain integration, customer loyalty and firm performance. The study utilized a partial least squares tool to analyze the data and tested for mediation utilizing the Sobel test for mediation. The results demonstrate the significance of social capital within retail firm supply chains as well as in retail firm customer loyalty. Additionally, social capital did mediate the relationship between supply chain integration and firm performance within the supply chain. Findings of this study expand the current body of knowledge by demonstrating the significance of social capital in retail firms, from supplier to consumer, throughout the Northeastern United States.

Dedication

This is dedicated first and foremost to my wife Alison Mask, and to my three children: Rickey Mask III, Audrey Mask and Conner Mask, who have had to endure this long journey with me. To my mother, Ronda French, who believed in me when nobody else did. To my mother-in-law, Agnes Gish, for loving me like I was her own. To all my friends who I consider family: Jacob Wroten, Sam Dluzniewski, Lance Amos, Jacob Pepper, Maria and Jonny Martinez and many others. To my father, Rickey Mask Sr., who died way too soon. To my grandfather, Lloyd French, for being like a dad to me. To my friend, Larry Garner, who stepped in the gap when nobody else would. To my hero, Maynard James Keenan, who kept me company on the many troubling nights I spent awake writing this. Finally, to every person who made sure I walked at my graduation: Carrie Zaharoolis, Joseph David Thomas, Michelle Soucy, Krystal Hartford, Jess Tolf, Kenneth MacDonald, Matt Page, Anastasia Ellis, Steven Cadwell, Craig Holland, David Teabo, Derrick Acosta and Nicole Alaimo. This is the culmination of 26 years of hard work and it is dedicated to all of you, who helped make it possible.

Acknowledgments

A special thank you to my mentor, Dr. Andrew Borchers, for keeping me focused. A thank you to every professor who has continuously encouraged me throughout the years: Jason Stout, Lane Last, Dr. Carol Eckert, Diane Shaw, Melanie Hollis, Dr. Doug Cook and many others. Finally, thanks to Yim, Leem, Jones and Taylor for use of their respective studies.

Table of Contents

Acknowledgments.....	iv
List of Tables	viii
List of Figures.....	ix
CHAPTER 1. INTRODUCTION.....	1
Introduction.....	1
Background.....	2
Business Problem.....	3
Research Purpose.....	4
Research Questions.....	5
Rationale.....	5
Theoretical Framework.....	6
Significance.....	7
Definition of Terms.....	8
Assumptions and Limitations	9
Organization for Remainder of Study.....	10
CHAPTER 2. LITERATURE REVIEW	11
Introduction.....	11
Supply Chain Integration (SCI).....	12
SCI Key Performane Indicators (KPI)s and Successful Integration Processes	14
Supply Chain Integration and Firm Performance.....	15
Supply Chain Integration and Social Capital.....	18
Supply Chain Integration and Customer Loyalty	20

Customer Loyalty.....	22
Customer Loyalty and Social Capital	27
Social Capital	29
Social Capital and Innovation.....	30
Social Capital in the Supply Chain.....	34
Social Capital in Customer Loyalty.....	36
Summary.....	39
CHAPTER 3. METHODOLOGY	43
Introduction.....	43
Design and Methodology.....	43
Population and Sampling.....	45
Setting.....	47
Data Collection	47
Instrumentation	48
Hypotheses.....	48
Data Analysis.....	49
Validity and Reliability.....	50
Ethical Considerations	53
CHAPTER 4. RESULTS.....	54
Introduction.....	54
Data Collection Results.....	55
Descriptive Analysis.....	56
Variable Codings	56

Significance Findings.....	59
Mediation Findings.....	61
Analysis of Hypotheses.....	63
Summary.....	67
CHAPTER 5. CONCLUSIONS.....	69
Introduction.....	69
Evaluation of Research Questions.....	69
Fulfillment of Research Purpose.....	71
Contribution to Business Problem.....	72
Recommendations for Further Research.....	72
Conclusions.....	73
REFERENCES.....	74
STATEMENT OF ORIGINAL WORK.....	86
APPENDIX A. INFORMED CONSENT FORM.....	88

List of Tables

Table 1. Social Capital Structural Model.....	20
Table 2. Retail Consumer Mean and Standard Deviation Analysis of Each Measured Variable.....	57
Table 3. Retail Supply Chain Mean and Standard Deviation Analysis of Each Measureable Variable	58
Table 4. Retail Consumer Survey T-Values (Significance).....	60
Table 5. SCM Survey T-Values (Significance).....	61

List of Figures

Figure 1. <i>SC Relationship</i> . Adapted from “The Effect of the Supply Chain Social Capital,” by B., Yim & B., Leem, 2013. <i>Industrial Management & Data Systems</i> , 113(3), 324-349.....	7
Figure 2. <i>CL Relationship</i> . Adapted from “Service Loyalty: Accounting For Social Capital,” by T., Jones & S. F., Taylor, 2012. <i>The Journal of Services Marketing</i> , 26(1), 60-75.....	7
Figure 3. <i>CL to FP</i> . Adapted from “Service Loyalty: Accounting For Social Capital,” by T., Jones & S. F., Taylor, 2012. <i>The Journal of Services Marketing</i> , 26(1), 60-75.	28
Figure 4. PLS significance results for SCI and Firm Performance.....	64
Figure 5. PLS significance results for SCSC, SCCC, SCRC and firm performance.....	64
Figure 6. Sobel test for SCSC, SCCC, SCRC mediation of SCI and firm performance ...	65
Figure 7. PLS significance results for SC and Customer Loyalty	66

CHAPTER 1. INTRODUCTION

Introduction

A lack of customer loyalty is detrimental to retail firms, as repeat business generates growth and influences overall firm performance (Sun & Kim, 2013). Many factors play into the success or failure of sustaining customer loyalty within firms including the customer experience, (Smart, 2016). Factors such as customer engagement during the shopping experience, customer relationships built over time (Rao & Kumar, 2013), as well as situations that involve firm's logistics processes such as product availability and experiences with product returns (Bouzaabia, Allard, & Semeijn, 2013) influence the customer experience within firms.

All of these elements affect a customer's decision to shop at a firm again (Foscht, Ernstreiter, Maloles, Sinha, & Swoboda, 2013), which can be detrimental or helpful to a firm depending on what side of the loyalty they find themselves on. Even if one does not consider the detrimental effects of a lack of repeat business, that is a result of a lack of customer loyalty, the effects of an improperly handled customer experience coupled with a non-communicative supply chain can equate disaster. The importance of customer loyalty and its relationship to the supply chain is an essential area of concern.

The business community describes customer loyalty as being a dynamic and complex situation, by the broader, business-research community (Aksoy, 2013; Balaji, 2015; Watson, Beck, Henderson, & Palmatier, 2015). Customer satisfaction was once thought to be the overall determiner of customer loyalty, and while still an important factor, customer satisfaction is not the lone factor when considering customer loyalty. Trust, satisfaction, and quality of service

(Shpëtim, 2012) in addition to relationships (Merlo, Bell, Mengüç & Whitwell, 2006) that are built over time, generating social capital Jones and Taylor (2012) develop customer loyalty in the retail industry. According to Jones and Taylor (2012), social capital is described as collaborative relationships that have a connection to financial results. These collaborative links are not only pivotal in the creation of customer loyalty, but also in the success of the supply chain. Social capital mediates logistics processes through the forward and reverse supply chain by aiding in the implementation of supply chain integration (SCI; Yim & Leem, 2013). Kim (2013) asserts that SCI allows for clear communication and the setting of common objectives between all members of the supply chain.

The purpose of Chapter 1 was to provide the background that led to the creation of this research topic, the business problem that was identified, the purpose of the research, the research questions that were created to examine a gap in the research, a rationale, theoretical framework, significance of the study, definition of terms, the assumptions and limitations of the study, and finally a provided organization of the remainder of the study and the remainder of Chapter 1 is presented in that order.

Background

Being present in a retail environment day in and day out prompted the emergence of this dissertation topic. Retail firms must cater to the needs of their customers on a daily basis, while still keeping the interests of the business in mind. Customer loyalty is something that retail firms strive to attain through improvements in relationships with customers (Rao & Kumar, 2013), and customer satisfaction, however, other considerations such as product availability and logistics concerns still exist, and policies must still be enforced to protect the profitability of the retail firm business units (Bouzaabia et al., 2013). Adverse interactions between associates and

consumers, often neither monitored nor analyzed (Jeszka, 2014), in turn, leads to breakdowns in relationships, trust, satisfaction and ultimately, loyalty.

The creation of social capital and the creation of customer relationships can become a forgotten factor when examining store level policy adherence, as the option to retain store margin can become a more immediate factor. In addition to the pressing concerns within retail locations, the ever-looming cloud of competition in e-commerce exists, which sets the stage for a sink or swim scenario within retail firms. According to Walsh (2016), a blending of e-commerce and brick-and-mortar is happening as e-commerce superpowers like Amazon are prepping brick-and-mortar ventures, and brick-and-mortar giants are resetting their focus to morph into omnichannel retailers. However, the omnichannel vision of retailers is logistically complicated. According to Hübner, Holzapfel, and Kuhn (2016), brick-and-mortar retailers are merely a single channel within a set of complicated channels that make up retail logistics. Clear communication and supply chain integration (SCI) of these channels is critical to the success of retail firms. In addition to efficiencies produced by the logistical processes, the result is a seamless shopping experience Walsh (2016) for the consumer through multiple shopping avenues and an increase in customer loyalty to the firm. The creation of social capital influences both supply chain integration (SCI) and Customer loyalty (Yim & Leem, 2013; Jones & Taylor, 2012).

Business Problem

Retail stores face potential firm performance issues and monetary loss due to a lack of relationships with their customer base (Wagner, 2015) and superficial treatment of processes within omnichannel retail logistics processes (Jeszka, 2014). Factors involving retail firm logistics can be quite expensive (Bouzaabia et al., 2013). Reverse logistics costs, from the point of return alone, make up approximately \$100 billion-a-year, approximately 4% of the U.S. Global Domestic Product (GDP), in losses for manufacturers (Blanchard, 2012) and \$267

billion-a-year in lost sales for retailers (Penske 2014). Rouse (2016) asserts that omnichannel retailing is structured to provide the consumer with a seamless shopping experience online, over the phone, by app or in a brick-and-mortar location. Additionally, Rouse (2016) states that the advantage of the omnichannel structure is a true integration that can assist the customer just as efficiently in the store as they can by phone or internet chatbox. According to Grawe, Autry and Daugherty, 2014; Huscroft, Hazen, Hall, Skipper and Hanna, 2013, social capital and customer satisfaction are vital concerns in logistics processes and how these processes can affect customer loyalty in service firms, but it has yet to be tested in retail companies. Foscht et al. (2013) assert that the customer experience within retail firms and their experiences with retail firm logistics processes affects a customer's decision to shop at a firm again. Retail firms face complications in the proper handling of in-store processes and relationships with customers. Retail firm logistical processes are a cause of monetary loss and the omnichannel environment that retailers are moving toward is creating additional challenges within logistics processes that are treated superficially by retail management. The results of this superficial treatment affect profitability in a negative way (Jeszka, 2014) and have a negative impact on relationships, necessary in generating social capital and customer loyalty (Jones & Taylor, 2012).

Research Purpose

The topic chosen enhances and complements the existing body of research concerning the relationship between the existence of social capital as a feature of and, a mediating factor between supply chain social capital and firm performance as well as the presence of social capital within retail firm customer loyalty. The primary purpose of this study is the examination of customer loyalty as a result of the existence of social capital and, ultimately, an understanding of social capital in the implementation of SCI in retail firm logistics in the Northeastern portion of the United States. This study focuses explicitly on retail SCM and the consumer retail sector

of the Northeastern United States. This study will aid practitioners of business and retail firms, in general, by increasing the overall body of knowledge associated with this aspect of the logistics and customer loyalty processes. By examining the relationship between social capital in customer loyalty and logistics of retail firms, one can gain a clearer understanding of the importance of this integration. When considering the \$150 - \$200 billion-a-year in lost sales that exists due to retail firm reverse logistics processes, as of 2013, (Rogers, Lembke & Benardino, 2013) the opportunity for improvement in retail firm reverse logistics processes is an apparent necessity.

Research Questions

Presented below are two specific questions addressed by this dissertation. These questions relate to the proposed solution offered by this dissertation. Their answers lend additional insight into the area of logistics, customer loyalty, and social capital, and lend themselves to future research within these areas.

1. What are the relationships between social capital, the implementation of SCI and firm performance?
2. What is the relationship between social capital, customer loyalty and firm performance?

Rationale

Yim and Leem (2013) make an explicit call for research examining the relationship of social capital as a mediating factor for SCI implementation, directed at a particular industry. Additionally, a call for additional research into the relationship of social capital and customer loyalty is made by Jones and Taylor (2012). The relationship that social capital has to SCI and customer loyalty within retail firms are two calls to future research examined in this dissertation. Additionally, this research explores the connections that SCI demonstrates in regards to customer

loyalty within retail firms. All of these elements create an environment within retail firms that aid in a more consistent customer experience, more consistent logistics processes, as well as enhanced customer loyalty. This dissertation takes previous research to the next step by considering social capital in the implementation of SCI in logistics processes of retail firms and demonstrates how this application effects firm performance, forward and backward, within the supply chain, in addition to its impact on customer loyalty towards retail firms.

Theoretical Framework

The Yim and Leem (2013) questionnaire provided the data utilized to examine the variables in research question 1 and author has secured the appropriate permissions to utilize this questionnaire. This questionnaire was submitted to SCM professionals within the retail supply chain of the Northeastern United States. The three dimensions of social capital (relational, structural and cognitive) are tested against SCI and customer loyalty. Yim and Leem (2013) identify these specific variables as supply chain relational capital, supply chain structural capital, supply chain cognitive capital, SCI and firm performance. This is in Figure 1.

The Jones and Taylor (2012) questionnaire that was provided to retail firm consumers provided the data utilized in the 2nd research question and the author has secured the appropriate permissions to utilize this questionnaire. Jones and Taylor (2012) present this framework in their study of a single firm of the service industry. In their research of the service firm, Jones and Taylor (2012) demonstrate how the customer relationship with the service provider employee positively influences customer loyalty. This same relationship was expected to exist within retail firms. This is in Figure 2.

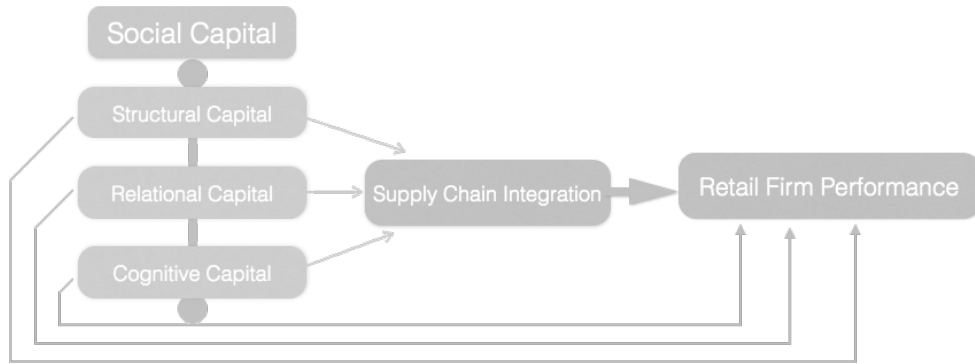


Figure 1. SC Relationship. Adapted from “The Effect of the Supply Chain Social Capital,” by B., Yim and B., Leem, 2013. *Industrial Management & Data Systems*, 113(3), 324-349. Copyright 2013 by B., Yim. Adapted with permission.

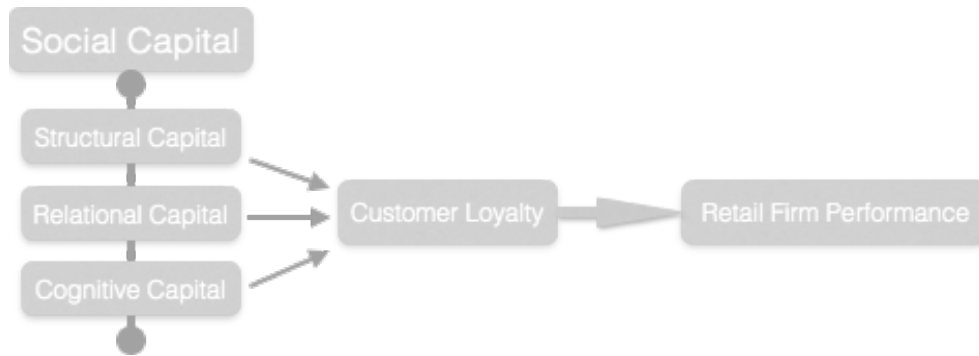


Figure 2. CL Relationship. Adapted from “Service Loyalty: Accounting For Social Capital,” by T., Jones and S. F., Taylor, 2012. *The Journal of Services Marketing*, 26(1), 60-75. Copyright 2012 by T., Jones. Adapted with permission.

Significance

The research presented shows that processes that create consistency, such as SCI, can have positive effects on retail firm logistics processes. Current research has not demonstrated the actual extent of firm performance increase due to the implementation of these processes nor the impact that this has on customer loyalty. This study focused on the opportunity area generated by logistics processes and relationships in retail firms and the loss of not only performance but also customer loyalty due to a lack of integration of processes and lack of relationships with the consumer base. Trust, satisfaction, quality of service (Shpëtim, 2012) and relationships (Merlo et al., 2006), built over time, generates customer loyalty in the retail

industry. These relationships are the building blocks of social capital (Jones & Taylor, 2012). All of these elements are factors that create the customer experience. Customer engagement during the shopping experience, customer relationships built over time Rao and Kumar (2013), as well as situations that involve firm's logistics processes such as product availability and experiences with product returns (Bouzaabia et al., 2013), influences the customer experience within retail firms. Within the last five years, reverse logistics within retail have made up \$150 - \$200 billion-a-year in lost sales for retailers (Rogers et al. 2013). Implementation of consistent SCI processes, mediated by social capital, should aid in both the creation of customer loyalty and with the creation of uniform reverse logistics processes to aid in reducing losses in retail reverse logistics processes.

Definition of Terms

Reverse logistics. Reverse logistics encompass the taking back or returning of products, and the methods used to accomplish this task. (Cojocariu, 2013).

SCI. Supply chain integration is defined as a shared direction and collaboration within a supply chain, often with the use of shared IT systems. A critical part of supply chain management is SCI (Näslund and Hulthen, 2012).

KPI's. Key performance indicators are defined by Parmenter (2015) as metrics utilized by businesses to evaluate crucial factors in regards to organizational success.

Cognitive capital. Cognitive capital is defined by Liao and Welsch (2005) as the resources that provide a shared representation, interpretation or agreed upon norms amongst members of a party or group.

Relational capital. Relational capital is defined by Liao and Welsch (2005) as the relationship behaviors such as trust, respect, friendliness.

Social capital. Social capital is defined by Woolcock and Narayan (2000) as the behaviors and actions that enable people to act cooperatively and successfully.

Structural capital. Structural capital is defined by Liao and Welsch (2005) as the patterns of connections between actors, determining who you are going to reach and how you intend upon reaching them.

Assumptions and Limitations

This dissertation is an explanatory, quantitative study utilizing inferential statistics and was designed to examine the relationships between social capital, SCI, customer loyalty and firm performance. This study's assumptions are similar to the results of the Yim and Leem (2013) and Jones and Taylor (2012) studies; only these results will be reflected in the retail industry. Specifically, this study assumed that social capital demonstrates a mediating relationship between SCI and firm performance and social capital demonstrates a direct link to customer loyalty.

This chapter reviews several limitations that occur in this study. The study was purposefully limited to a single industry to examine SCI, customer loyalty and social capital within the retail sector from supply chain to consumer. The conductor of this study has previously been involved in retail management, and this has the potential to influence the material presented and the perceptions of the study, so the study took particular precautions. Use of quantitative analysis and pre-existing questionnaires limited bias.

To offset these limitations, the study utilized two questionnaires', one created by Yim and Leem (2013) and one designed by Jones and Taylor (2012). Each questionnaire targeted a particular group. The questionnaire created by Yim and Leem (2013) targeted supply chain management within the retail supply chain in the Northeastern United States, while the questionnaire created by Jones and Taylor (2012) targeted retail consumers within the

Northeastern United States. The population density in the Northeastern United States provides a diverse population sampling. These two groups demonstrated a correlating relationship in regards to social capital and firm performance as previous studies concluded similar results (Yim & Leem, 2013; Jones & Taylor, 2012). A partial least squares (PLS) SEM instrument was utilized by the study to test the data. Rigorous reviews of the data, across multiple tests, also aided in reliability and accuracy.

Organization for Remainder of Study

The remainder of this dissertation encompasses five chapters. Chapter 2 is a review of the available literature as it pertains to the aforementioned research questions and is current research relevant to the field of logistics and methodologies as they relate to social capital, customer loyalty, and firm performance. Chapter 3 provides information about the research methodology utilized to answer the aforementioned research questions along with a review of ethical concerns, data analysis description, and validity and reliability of the study. Chapter 4 presents the data analysis and findings. Chapter 5 provides conclusions, key findings, and recommendations for future research.

CHAPTER 2. LITERATURE REVIEW

Introduction

The focus of chapter 2 within this dissertation is a literature review of several topics that have a direct relation to the aforementioned research questions. The first section consists of a review of literature about Supply Chain Integration (SCI) and how it came into existence as a viable concept for the creation of consistency amongst all parts of the supply chain to positively impact firm performance. SCI was broken down and examined to identify the most integral parts and what difficulties lie in its implementation within the supply chain. Chapter 2 includes a review of SCI's relationship to social capital. Additionally, Chapter 2 includes a look at what factors lead to successful implementation and mediation within supply chains.

The next section of Chapter 2 was an examination of the current challenges of creating customer loyalty within retail firms. Chapter 2 consists of a review of the relationship between the customer experience and customer loyalty. Customer loyalty and customer loyalty programs were also examined. Additionally, Chapter 2 includes an analysis of customer loyalty's relationship to social capital.

The third section of Chapter 2 includes an examination of the existence of social capital within our world. Social capital's role in firm innovation was examined as well as the roles of top level and middle managers in creating and managing social capital within firms. Additionally, the relationship of social capital to various factors including its relationship to the supply chain as well as its relationship to customer loyalty is also included in Chapter 2.

Supply Chain Integration (SCI)

Several definitions of SCI exist, and two of these definitions are presented here. Woods (2016) asserts that SCI is defined as a close alignment/coordination of the necessary parts within a supply chain, where raw materials, manufacturing, transportation of merchandise and supporting services are linked together through detailed communication and understood procedures. Kim (2013) defined SCI as the degree to which a firm operates with other firms to propagate the direction of decisions, information, cash, and merchandise. This flow is inclusive of upstream integration with the supplier and downstream integration with the consumer. Gimenez, Vaart, and Donk (2012) stated that high supply complexity situations such as retail firms were a prime candidate for SCI implementation.

According to Vickery, Jayaram, Droge, and Calantone (2003), the pathway from customer service, built through customer relationships, is the mediating factor that connects SCI/ SC IT integration into a firm. The trusting relationships that firms develop with their consumer base is a critical component of social capital. Trust, in and of itself, is the initial building block to long-term relationships. Social capital was a direct focus of both of the research questions demonstrated in this dissertation.

Supply Chain Integration was determined to be one of the most important factors when creating a competitive advantage through internal and external networks (He & Lai, 2012; Cousins & Menguc, 2006). Huo, Qi, Wang, and Zhao (2014) assert that SCI performance is not solely measured by increases in financial gain, but also in the increase in operational efficiency. Huo et al. (2014) assert that integration of the supply chain helps all supply chain partners to leverage all resources, as shared information between supply chain partners is cultivated through integrated practices. The interactions that are focused around integration, according to Huo et al. (2014) allows for products to be designed by multiple members input and ensures that product

quality meets the standards of all partners. Additionally, Huo et al. (2014) assert that the main goal of the organization and the reason for integration is to create value for the consumer base.

Basnet (2013) asserts that the integration of the supply chain involves the shared performance of supply chain activities between multiple departments and supply chain partners. Basnet (2013) conducted a survey in an attempt to develop an instrument that would give an accurate picture of SCI. Through this survey Basnet (2013) determined that communication, coordination and effective relationships are three factors within integration construction. This topic was examined in research question 1 of this study.

Kim (2013) states that SCI is becoming more and more recognized as a generator of competitive advantage for firms who utilize it properly. According to Kamal and Irani (2014), improved firm performance, effective cooperation and communication, facilitation of feedback and correspondence, operational effectiveness and overall performance, improvements in monetary gains, active customer service and responsiveness, followed by improved merchandise standards, logistics management and SC nimbleness, flexibility and visibility are the most cited factors that drive competitive advantage. When implemented properly SCI can support the achievement of all of these goals.

Zhang, Gunasekaran and Wang (2015) brought forth a comprehensive listing of the components of SCI including material integration, information integration, knowledge integration, process integration, organization integration and strategy integration. Material integration was defined on four levels which include material handling, handling management and delivery decision support. Zhang et al. (2015) states that integration makes up the core of SCM and must be accompanied by a solid understanding of what the integration process means. According to Anand and Grover (2015), the need to improve the performance of the supply chain is an ongoing need and in order for retail supply chains to survive they must learn to be adaptive

and responsive to the needs of their consumer base. Additionally, Anand and Grover (2015) state that established material handling procedure is a large part of the success or failure of the returns processes within retail firms, and improvement to processes, such as those associated with logistics, is crucial to improve customer satisfaction, customer loyalty, and to remain fruitful in the marketplace. This helps to provide an understanding as to why social capital is a pivotal component from the supply chain all the way forward to the consumer.

SCI Key Performance Indicators (KPI)'s and Successful Integration Processes

KPI's for SCI were examined by Anand and Grover (2015) to determine the main categories of focus for defining and measuring SCI. Substantial indicators of the success of SCI were profitability, customer satisfaction, product delivery and waste elimination. The KPI's presented were also categorized as SMART (Specific, Measurable, Attainable, Realistic and Time-sensitive) goals. According to Conzemius and O'Neill (2011), setting SMART goals is a method of setting objectives in project management and performance management that focus attention on the most vital elements necessary for improvement. All of the listed KPIs met the criteria of being SMART. Anand and Grover (2015) assert that, since their KPI's meet the SMART criteria, the next step would be to validate their assumption through a study utilizing SEM.

Zhang et al. (2015), demonstrate a model for successful implementation of SCI that suggests it should begin internally sound first and then extend to the partners they have aligned with throughout their supply chain. Consistency is thereby created through external logistics implementation. Inevitably the process should run so seamlessly that there will be nothing to distinguish between upstream or downstream logistics integration. The technology was utilized in the model to promote interconnectivity between all channels of the business.

This study promotes an integration emphasis between all parts of the firm's processes as well as the firm's supplier. The three sections of integration are strategic integration, managerial integration and operational integration. The managerial section controls planning and organization and the operational section controls process and the flow of materials, information, knowledge and finance. All three components work toward the ultimate goal of creating a consistent, integrated experience from the supplier to the consumer. This ultimately creates consistency for the customer experience as a whole. The recommended processes are unified forward and backward through the supply chain. Additionally, this level of integration ensures the efficient use of resources.

The whole supply-chain, within this model, works as a single unit from supplier to consumer. This process perpetuates the efficient flow of products and services backward and forward within the supply chain allowing for the most cost-effective delivery to the customer. According to Singh and Raghuvanshi (2014), customers are intelligent, talented and busy, and processes within retail firms should work for them. As such, consistent supply-chain integration processes should help to make this a reality and aid in continued customer satisfaction and the growth of customer loyalty. Chandrashekar, et al. (2007) notes that loyalty is generated through the strength of relationship as well as the strength of the satisfaction experienced by the consumer.

Supply Chain Integration and Firm Performance

Childerhouse and Towill (2011) conducted an eight-year study following more than 50 product groups within their diverse supply chains. Their supply chains yielded that SCI does positively influence firm performance. Childerhouse and Towill (2011) noted that relationship linkages, shared information integration and sharing of resources among firm partners were particularly impactful in the integration of the supply chain. It appears that due to the lack of

flexibility of full integration, that a shared mindset and strong relationships would be necessary for proper integration to occur. Childerhouse and Towill (2011) identified a sub-par integration in some supply chains and the results for these areas was sub-par as well. Fawcett and Magnan (2002) attribute some of this less than exceptional integration practice on a short-term gain focus by procurement managers as they tend to overlook the long-term advantages of relationships. Supply chain integration is only as good as the team that is using it and creating partnerships that harbor social capital within the supply chain is the key. Research Question 1 focuses on examining the level of integration that exists within retail firm supply chains.

Childerhouse and Towill (2011) examined 33 of their 50 products supply chains by utilizing the Quick Scan audit methodology. Interviews and archival reviews were utilized to examine the remaining 17 supply chains. The data was compiled and compared within the 5-Arcs of Integration. These arcs include; internally-facing, boundary-facing, supplier-facing, consumer-facing, and externally-facing. The examination of the arcs comparative performance was completed using 16 indicators. The study confirms that it is necessary for companies to make sure that their practices and processes are in order before moving forward with internal or external integration practices.

According to Kim (2013), internal integration is necessary and needs to be combined with external integration to enhance customer satisfaction and improve competitive advantage. Integration of key suppliers upstream in the supply chain is able to move forward once this is completed. Communication and information within the supply chain are critical to keep inventory in check and build relationships. The customer is integrated into the final phase of the full-on integration as they are, in most cases, the final mover of the product. The last step enhances customer service and builds loyalty, but can be the hardest to attain as direct contact is controlled by the firm itself. Additional conclusions of Childerhouse and Towill (2011) confirm

that companies who are more noticeably integrated into their supply chains are more competitive in the global market vs. companies who are not. The level of integration can become evident for consumers at the return desk of retail firms, by how inclusive the returns process is for items they purchase. Integration allows for more items to be returned more easily. Companies with integration partners in their supply chains are able to provide consumers with a more streamlined and inclusive return experience. According to Huscroft et al. (2013) reverse logistics can be utilized to satisfy customer needs and the value of that relationship can-not be understated. This topic holds such importance that Huscroft et al. (2013) made a call for additional metrics to quantify the role of reverse logistics in customer satisfaction. This allows firms to utilize their reverse logistics as a competitive strategy in building consumer confidence.

According to Huo et al. (2014), competitive strategies put in place have a significant influence on the effectiveness of SCI. Huo et al. (2014) assert that financial performance and operational performance must both be considered to understand the success of SCI entirely. In a study administered by Huo et al. (2014) data were collected from 604 Chinese manufacturers, yielding a 22.5% response rate and the data were analyzed utilizing a hierarchical linear regression. The study supports the assertion that fit between SCI implementation, and competitive strategies will determine firm performance.

Chang, Ellinger, Kim and Frank (2016), propose that SCI can not only influence overall firm performance, but can also lend itself to a sustained competitive advantage. Through their study, Chang et al. (2016) examine various dimensions of SCI and their relationship to firm performance. The dimensions examined include internal integration, supplier integration and customer integration. The dimensions of firm performance are categorized into three types: operational firm performance, financial firm performance and strategic firm performance. The study conducted by Chang et al. (2016) provides a comprehensive meta-analysis of 170 samples

which are representative of approximately 40,000 observations. In order to avoid selection bias the researchers assembled the 170 samples completely independent from one another and some of the included material actually was derived from unpublished studies.

Chang et al. (2016) demonstrate in their conceptual model that the relationship between financial performance and internal integration, supplier integration and customer integration are mediated by operational performance, relational performance and strategic performance, while still demonstrating a direct relationship. Chang et al. (2016) conclude that all firm performance variables have a significant, mediating relationship between SCI and financial performance of the firms.

Supply Chain Integration and Social Capital

According to Zhang and Huo (2013), dependence is a need to maintain relationships with business partners throughout the supply chain and trust is viewed as a critical form of social capital that facilitates cooperation amongst supply chain partners. Zhang and Huo (2013) conducted a study to test the joint influence of trust and dependence in supply chain relationships on SCI and financial performance. A total of 1,356 questionnaires were distributed amongst SC managers, Chief Executive Officer's, company presidents, executives at the senior level, VP's, directors at the senior level and other senior management within Chinese manufacturing firms. Of the 1,356 questionnaire's 617 usable samples were collected. The response rate was made up of 45.5% survey responses and 13.5% telephone surveys. Structural equation modeling (SEM), used to estimate relationships, was utilized to test results. Results from the study determine that dependence and trust are positively associated, and that trust is a mediator between dependence and SCI. Trust is multidimensional and helps to reduce uncertainty and facilitate interaction and communication among individuals. When partners within the supply chain are able to trust one another, confidence builds within the relationship. The newly formed relationship can then

develop expectations of behaviors which helps to sustain relationships, long-term. Additionally, trust was listed as a significant enabler of SCI. Zhang and Huo (2013) assert that this trust also enables all members of the supply chain to have access to the same information and resources. Shared proprietary technology, trade secrets and service quality are all shared and improved upon as integrative relationships are cultivated and sustained.

According to Yim and Leem (2013), social capital is a mediating factor between SCI and firm performance. In the study conducted by Yim and Leem (2013) social capital was divided into three constructs; supply chain structural capital, supply chain relational capital and supply chain cognitive capital. The hypotheses presented by Yim and Leem (2013) noted that each one of these constructs would demonstrate a direct, positive relationship on firm performance. Utilizing a partial least squares (PLS) and SEM, Yim and Leem (2013) examined the relationships between these variables. Yim and Leem (2013) chose the PLS because it was based from a covariance model vs. a variance model. Data were collected from a random sampling of components and parts suppliers, manufacturers of the products, distributors of the products and providers of logistics services in Korea. The questionnaire was sent through the standard mail, e-mail, and face-to-face or phone contact. Out of 1,000 questionnaires, 432 were returned yielding a 43.2% response rate of which 420 or 42% were usable. As previously stated, the three components presented that make up the structure of social capital are relational capital, structural capital and cognitive capital. Reliability of these variables was tested utilizing Cronbach's α and the composite reliability for the five variables was more than 0.7, proving the measurement model to be consistent and reliable (Yim and Leem, 2013). These results are demonstrated in Table 1.

Yim and Leem (2013) noted that SCI was the intermediary between the relationship of social capital and firm performance and that relationships amongst members of the supply chain,

in multiple industries, enabled higher levels of firm performance. Research question 1 focuses on examining these components within retail firm supply chains.

Table 1
Social Capital Structural Model

Variable	AVE	Composite Reliability	Cronbach's α
Relational Capital	.53	.82	.70
Structural Capital	.68	.80	.57
Cognitive Capital	.86	.93	.84
SCI	.69	.87	.78
Firm Performance	.69	.87	.77

Note. Adapted from "The Effect of the Supply Chain Social Capital," by B., Yim and B., Leem, 2013. Industrial Management & Data Systems, 113(3), 324-349. Copyright 2013 by B., Yim. Adapted with permission.

According to Yim and Leem (2013), the purpose of their study was to present an understanding of the effect of supply chain social capital on the performance of manufacturing firms and the mediating effects of SCI on this relationship.

According to Hammervoll (2011), relational capital within the supply chain is a summation of goodwill, trust, and respect between members of the supply chain. Social and collaborative processes, improved through relationship interactions, are created through routines that are built over time. In addition to relational capital Hammervoll (2011) also includes financial capital and psychological commitment into what defines supply-chain relationships (SCR). Hammervoll (2011) notes that when these additional factors are considered, personnel involved in initiating SCR's often undervalue relational capital and thereby miss the creation of common objectives between all members of the supply chain.

Supply Chain Integration and Customer Loyalty

According to Jiang (2011), supply chains, as of 2011, have been actively working on the formulation of the integrated business practices that are affixed to the cultivation of customer loyalty. Lam and Ip (2011) state that understanding customer satisfaction is understanding that they are influencing the performance capabilities in inventory management. Russo and Confente

(2018) assert that customer loyalty is driven by managers in the supply chain and ultimately is the result of years of experience and the topic being expounded upon in the literature. Jiang (2011) asserts that the real value of the supply chain lies in its ability to provide the consumer with products and services that meet their demand and customer loyalty and satisfaction are the output of that effort. Additionally, Jiang (2011) asserts that the consumer is the basic feature of the supply chain because every part of the supply chain is dedicated to the production and delivery of goods to and from the consumer. Coordination, controlling and the scheduling of all parts are heavily responsive to the needs of the consumer. As such, integration of these parts must work efficiently forward and backward through the supply chain in order to meet those needs.

Eggert, Henseler, and Hollmann (2012) assert that increasing levels of competition in the global market have caused the focus of customer loyalty to be a primary concern of brand manufacturer's and was also spilling over onto distributors alike. Confusion can exist in this process as it becomes unclear as to where the customer loyalty lies, whether it be directed toward the manufacturer or the distributor. When integration occurs, the loyalty of the customer can be more clearly focused on the supply chain as a whole and not on a single part of the supply chain, which helps alleviate confusion.

According to Fayezi and Zomorodi (2015), integration of relationships within the supply chain allows for a more flexible supply chain. Flexibility within the supply chain, helps firms to meet the needs of the consumer better. This lends itself to a competitive advantage for those firms that understand this need. Fayezi and Zomorodi (2015) assert that it is crucial for firms to understand and implement various tools and key practices which can usher in agility and flexibility. Additionally, Fayezi and Zomorodi (2015) state that it is pivotal to create trust amongst all partners throughout the supply chain, all the way to the consumer.

According to Kibbeling, van der Bij and van Weele (2013), one of the newest struggles within firms, is a reliance of focus on their core competencies. Although this idea makes sense, it adds new challenges as various activities that are listed as non-core activities are being outsourced in large numbers. As such, firms are having to focus new attention on the relationships that exist between the firm and all of the partners that they employ in order to meet customer needs. End-user satisfaction can be difficult to manage as there are so many firms involved in the creation and delivery of products and services to consumers. According to Kibbeling et al. (2013), end-user satisfaction was a culmination of consumer encounters, with a firm, over time. This end-user satisfaction determines the continuation of a firm as this was an indicator of customer loyalty.

According to Li, Ragu-Nathan, Ragu-Nathan, and Rao (2006), an essential dimension in supply chain management practices (SCM) was relationships with consumers. This key dimension was defined as the entire set of practices that are utilized to manage customer concerns, grow relationships and improve customer experiences. Li et al. (2006) assert that loyal customers are a sustainable competitive advantage as they act as a barrier to potential competition. As such, research questions 1 and 2 work together to examine customer loyalty and how it was influenced by SCI.

Customer Loyalty

Noskova and Romanova (2015), state that the goal of modern marketing was to create a loyal customer base through the implementation of long-term relationships with its consumers. Long-term relationships create gains in profit as individual transactions evolve into reoccurring transactions that maximize profitability. This maximization of performance due to the presence of customer loyalty was examined through research question 2. Trust, satisfaction, quality of service (Shpëtim, 2012) and relationships built over time Vickery, Jayaram, Droge, and

Calantone (2003) generate customer loyalty within the retail industry. According to Isoriate (2016), customer loyalty was the most significant factor in not only ensuring business success but also in maintaining and enhancing the experiences of a long-term customer base.

A study conducted by Balaji (2015), demonstrates how investment in relationships with consumers can lead to increased firm profitability and that customer loyalty was the product of relationship investment, satisfaction, and trust. According to Ganiyu, Uche and Elizabeth (2012), customer relationship creation may appear elusive, but keeping a loyal customer base that is often inclined to pay a premium for merchandise and services can help reduce costs associated with relationship creation. Balaji (2015), asserts that trust is a key motivator in creating a customer relationship that breed loyalty. Balaji (2015) goes on to say that the depth of the relationship is determined by the number of ties the customer has to the firm. Balaji (2015) concludes that a competitive advantage and profitable customer relationships are a direct result of the firm's investment in the relationship with its customers.

Belas and Gabcova (2016) examined customer loyalty in a commercial bank setting. Belas and Gabcova (2016) note that customer satisfaction alone does not guarantee customer retention. Additionally, Belas and Gabcova (2016) note that a long-lasting relationship is much stronger than customer satisfaction alone and the results of this relationship not only influence repeat business, but organically increase business through word of mouth. Other benefits of this relationship are also expounded upon. Belas and Gabcova (2016) state that lower acquisition costs, willing to pay premium prices and increases in overall market share are a direct result of the relationship created through customer loyalty.

According to Grideanu and Cruceru (2013) customer loyalty is the level of quality consumers that demonstrate consistent tastes, predictable behaviors, and an ongoing emotional attachment to a firm. The management of customer loyalty is directed by proper planning and

the implementation of proper controls in order to cultivate and maintain relationships based on those behaviors.

Grideanu and Cruceru (2013) divide consumers into four categories based upon the loyalty strategies that are used to sustain an ongoing relationship with them. Grideanu and Cruceru (2013) describe the “star consumer” as one demonstrating behaviors of a long-term relationship with the firm and with a high-level spend threshold. The “productive consumer” is described by Grideanu and Cruceru (2013) where the length of relationship is unpredictable, but high-level spend is expected. Grideanu and Cruceru (2013) define the “problematic consumer” as unprofitable and having a short relationship with the firm. Finally, Grideanu and Cruceru (2013) define the “question mark” consumer as an anomaly as behaviors may not have developed yet. Understanding the various forms of consumer helps firms to properly serve them in a manner that will be most profitable to the firm.

Grideanu and Cruceru (2013) concluded that the development of relationships leads to an increase of customer loyalty the overall profitability of the firm. Additionally, Grideanu and Cruceru (2013) assert that many other benefits, such as reductions in cost, reductions in production time and reductions in risk to the business become apparent when a customer loyalty based relationship is formed.

According to McDonnell, Beatson and Huang (2011), relationships of superior quality create long-term business bonds. McDonnell et al. (2011) also assert that consumer retention and loyalty are essential to the long-term existence of business firms. McDonnell et al. (2011) determined that trust, commitment and satisfaction are critical dimensions of the quality of business relationships. Additionally, McDonnell et al. (2011) noted that loyalty is built from a high level of trust for the firm. Customer loyalty is thereby built from a base of trust that has been developed with the firm over time.

According to Sujata, Sanjay, and Swati (2014), the customer service experience was defined as the total sum of interactions in every instance of customer-firm interaction. Additionally, Sujata et al. (2014) assert that the customer experience can drive customer loyalty, willingness to buy, pay more for products/services and recommend firms to others.

A study conducted by Sujata et al. (2014) examined the customer and experience parameters that influence customer loyalty. The study targeted 500 direct to home shoppers in India, 480 were returned, and they were broken down by sex and age. There were 324 males and 156 females yielding a response percentage of 96%. A two-part questionnaire was utilized in the study. Part one of the survey consisted of a 7-point Likert scale with questions about service attributes. The following section of the study focused on a segmentation breakdown that captured data on monthly spending habits, intent to spend, intent to recommend and intent to churn. Also, part two of the survey collected information on the customer's use of additional and interactive services.

The research concluded that the customer experience was enhanced by focusing on aspects of relational capital such as winning a customer's trust. Further examination of relational capital was a focus of this dissertation as it is one of the pillars of social capital, which was present in research questions 1 and 2. Sujata et al. (2014) also concluded that every unit increase in the customer experience shows a direct correlation to intent to spend and intent to purchase.

Srivastava and Kaul (2016) assert that in recent years the importance of the customer experience has come to light and it was up to retail managers to provide value and a customer experience that was exceptional to retain a loyal customer base. Additionally, Srivastava and Kaul (2016) assert that consumers visits to retail firms were focused on entertainment, in addition to purchasing intentions and that this enjoyment was often directly related to how they rate the service they received at the firm.

Babin, Darden, and Griffin (1994) concluded that the utilitarian purpose of the retail store and its emotion inducing experience are both relevant factors when considering customer loyalty. Demonstrating that consumers want their needs to be met, but would also like a memorable experience. According to Srivastava and Kaul (2016), the retail customer experience has emotional significance and that the process of creating an experience that perpetuates loyalty was a series of occurrences that include aesthetics, entertainment, and education that revolve in an experiential environment.

Srivastava and Kaul (2016) conducted a study that views the relationship of attitudinal loyalty, which was defined as a customer's decision to identify with a particular product over competitors, behavioral loyalty, customer experience, and consumer spend.

Data were collected for the study through a questionnaire that was intercepted at a mall. The conditions for the targeted group included that they had purchased from Pantaloon, Lifestyle, Shoppers Stop and Westside, each of which are leading retail locations in India. Of the 1000 targeted consumers, 840 were deemed usable, yielding an 84% usability rating.

The questionnaire for the study had two parts. Questions that focused on the type of service the consumer utilized and the length of the relationship the consumer had with the firm made up the first part. The second part focused on elements of the customer experience, the relationship of the consumer to the firm and loyalty to the firm. A 7-point Likert scale was used to assess both sections of the questionnaire. The male to female ratio in this study showed little to no bias as it was close to a 50/50 split between males and females. The hypotheses were tested using SEM and four constructs.

The findings demonstrate that customer experience affects consumer spend through attitudinal loyalty and behavioral loyalty. The study concluded that a positive customer experience leads to long-term impacts on retail performance via customer loyalty. This study

concur with Rao and Kumar (2013) in their assertion that the customer experience within firms was influenced by customer engagement during the shopping experience and Jones and Taylor (2012) assertion that customer relationships are built over time, which was also in direct support of research question 2 within this study.

Customer Loyalty and Social Capital

According to Villacé-Molinero, Reinares-Lara and Reinares-Lara (2016), excessive competition in the global market has created intense focus on acquiring and keeping customers. The cost of acquiring new customers is increasing rapidly, so keeping existing customers is becoming more and more important. Additionally, according to Anderson, Fornell and Lehmann (1994), profitability from customers increases as loyalty increases over time, so initial purchases are not what's truly driving the business. This makes newly acquired customers even less valuable and repeat customers that much more important. Villacé-Molinero et al. (2016) assert that these situations have made customer loyalty a necessity for a business to achieve profitability. As previously mentioned, there are two types of customer loyalty. Srivastava and Kaul (2016) assert that these two types of loyalty are behavioral loyalty and attitudinal loyalty. Villacé-Molinero et al. (2016) describe behavioral loyalty as loyalty expressed through choices, such as repeat purchases and attitudinal loyalty was described as the customer conviction or inclination toward a specific firm.

According Chandrashekar, Rotte, Tax and Grewal (2007), customer relationships help to negate the vulnerability of reliance on customer satisfaction. Reliance on customer satisfaction alone is an unreliable approach due to the fickle nature of the firm's connection to the consumer. As firms make customer relationships a priority, they can move toward a deeper connection with the customer. Chandrashekar, et al. (2007) note that customer loyalty is a result of the relationship with the customer. According to Jones and Taylor (2012), relationships

with customers can be viewed as social capital and that the existence of these relationships is an important factor in the development of customer loyalty. Jones and Taylor (2012) conducted a study in which they examined the relationship of social capital, customer loyalty and its implications on service firm performance. The researchers of the study utilized a PLS technique for analyzing relationships and demonstrated that social capital does help predict customer loyalty. The theoretical framework of this examination is in Figure 3.

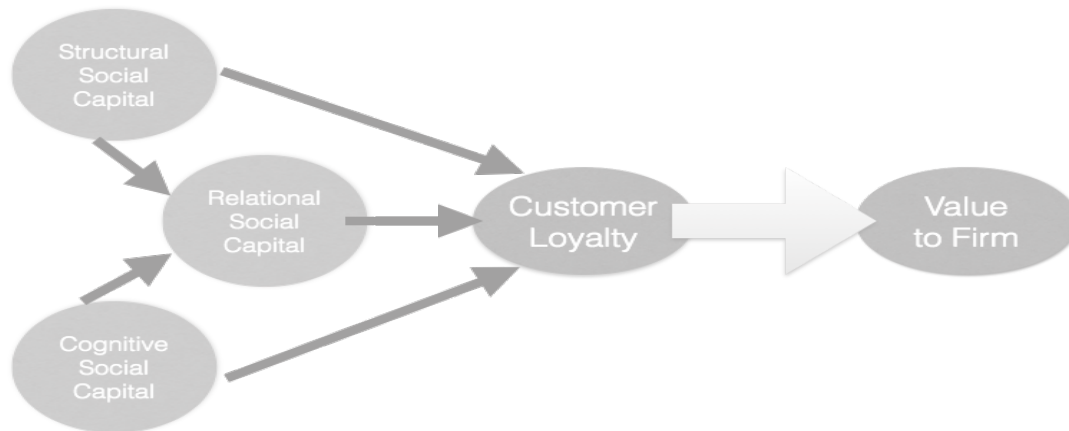


Figure 3. CL to FP. Adapted from "Service Loyalty: Accounting For Social Capital," by T., Jones and S. F., Taylor, 2012. *The Journal of Services Marketing*, 26(1), 60-75. Copyright 2012 by T., Jones. Adapted with permission.

According to Jones and Taylor (2012), social capital theory of recent years has been focused on how to generate economic revenue for firms that attempt to pursue it. Jones and Taylor (2012) assert that these outcomes are supported by open knowledge sharing, greater coherence in tasks, shared understanding, and higher employee loyalty and retention. Additionally, Jones and Taylor (2012) list social capital measure as the relationships internally as well as the relationships that occur externally with the consumer base and firm partners. Jones and Taylor (2012) go on to say that all of these relationships culminate into the true value of social capital which is the embedded nature of all of these relationships in relation to the firm. In the same manner as Yim and Leem (2013), Jones and Taylor (2012) utilized three constructs to represent social capital; structural social capital, relational social capital and cognitive social capital.

The three constructs of social capital are expounded upon well by Jones and Taylor (2012) as each construct is directly related to a presented hypothesis. According to Jones and Taylor (2012) evidence already exists in the research that supports the idea that repurchase intentions are influenced by preexisting relationships/relational capital, stronger customer loyalty coincides with the existence of cognitive social capital, and that the frequency of interaction has a direct impact on customer loyalty. According to Jones and Taylor (2012), frequency of interaction is reliant on the preexisting structure of the firm or its structural social capital.

Although the results of this study were consistent in noting that social capital does affect customer loyalty, there was a noticeable occurrence. Structural social capital, which deals with the frequency of interaction and duration of relationships with consumers, did not predict the occurrence or level of relational social capital within non-service situations. The idea was that the relationship was not made a priority when services focused on the possession rather than on the person which leads to less of an interactive relationship. This idea was examined within this dissertation through research question 2 as the targeted audience for the questionnaire was consumers of retail firms and not specifically service-oriented firms.

Social Capital

According to Hooghe and Stolle (2003), social capital is comprised of the different interworking relationships that exist within a societal segment enabling the segment to function as efficiently as possible. According to Madera (2012), at the Juniata College commencement, social capital was presented as one of the principal joys of life as its constructs help to mediate relationships with others. Social capital is something that is present in human interactions of every kind. This type of capital allows for the flow of information and ideas across cultures and boundaries. This flow of information, created by social capital, exists not only in the day-to-day interactions of neighbors or friends but in education, politics, and business.

According to Shen and Hartono (2015) knowledge is best transferred through informal social interaction and knowledge sharing is facilitated by social capital. Shen and Hartono (2015) examined social capital through a study examining knowledge sharing in online communities. In the results of this study, Shen and Hartono (2015) noted the importance of social capital amongst community members as greater level of communication positively influence the creation and sharing of information.

Understanding social capital requires an understanding of differing definitions of capital. According to Wunder (2015), economists define capital as something that generates payment returns in order to demonstrate its usefulness. This viewpoint of production is still given the predominate focus in research as it is easily measurable through numerical data. However, Wunder (2015) asserts that a clarification of capital was necessary to demonstrate how capital represents social relations of power. Wunder (2015) presents the non-collateralized student loan debt obligations as an example and helps to demonstrate capital in a manner that was not directly related to payment returns. Wunder (2015) notes that a degree is really an intangible concept, but still has financial and reputable benefits in comparison to the debt associated with it. This type of example also demonstrates how capital can exist outside of monetary outcomes, although capital must still be useful and measurable through desired outcomes. Wunder (2015) demonstrates how social capital can exist as a useful, measurable form of capital.

Social Capital and Innovation

Social capital is proving to lend itself to organization innovation as firms find it harder to compete in the growing, global economy. According to Pérez-Luño, Medina, Lavado, and Rodríguez (2011), the social capital framework creates a solid base to help innovation within an organization as it has positive effects on inter-organizational relationships. Pérez-Luño et al. (2011) assert that two critical portions of inter-organizational relationships are structural capital

and relational capital, which are both constructs that create social capital. This understanding of social capital, which lends itself to the benefit of supply chain integration, naturally presents itself as a valuable resource to innovation.

Sun, Fang, Lim and Straub (2012) assert that cognitive and relational capital increase consumer satisfaction and strengthen relationships between firms and consumers and these two types of capital are two of the key dimensions of social capital as a whole. Jones and Taylor (2012) define structural capital as the target audience you intend to reach and by what method you intend to reach them. Jones and Taylor (2012) define relational capital as the individualized relationships that are developed over time, through interaction, trust, and respect. According to Sankowska (2016), the existence of relationships built over time creates strong ties between employees within different parts of the organization. These ties translate into customer loyalty, when the same relationship skills are applied to the consumer base of the firm. Pérez-Luño et al. (2011) assert that healthy relationships create trust. Pérez-Luño et al. (2011) assert that the organization that harbors a flow of information that is more in-depth and efficient will generate greater commitments over time. These commitments not only come from employees, but also from consumers.

A study was conducted by Pérez-Luño et al. (2011) that demonstrates the function that social capital serves in innovation. The findings demonstrate an overall importance for relationships between firms and its external partners to influence the most radical innovation to the firm. Fulgoni (2014) asserts that external capital was also derived from consumer relationship insight. A factor that can be multiplied as social capital is built with a firm's consumer base. Innovation was also influenced by these relationships, exhibiting the importance of the relationship with the consumer.

According to Ehlen, van der Klink, Roentgen, Curfs and Boshuizen (2014), companies in hopes of staying relevant must consistently innovate in the globalized marketplace. Ehlen et al. (2014) present research in regards to knowledge production in the workplace and further develop factors affecting knowledge productivity utilizing the social capital theory. In addition to the three existing measures of social capital, structural, cognitive and relational, Ehlen et al. (2014) added a fourth dimension, the action dimension. This dimension was further elaborated on within the study, linking social capital, knowledge productivity and external factors, thereby demonstrating yet another area influenced by the presence of social capital.

According to Guo, Zhao, and Tang (2013), business model innovation (BMI) has become a topic of interest and, as such, the role of top managers in this process. Guo et al. (2013) assert that managers' social capital was defined by the individual manager's ability to build strong relationships with a firm's partners. Understanding a manager's role in this helps to cultivate relationships full of external knowledge and helps the firm to identify needs in the market they may have been unaware of. Zhang and Li (2010) confirm that the existence of these relationships has a direct tie to firm performance and product innovation.

A study conducted by Guo et al. (2013) suggests that the actions, skills, and capabilities of top managers influence a firm's BMI. A five-point Likert scale was utilized to survey participants and the first section was dedicated to social capital. Out of 500 surveys, 146 were collected, reflecting an adequate sampling of 29.2%. All of the factors which effect the social capital section showed a positive correlation, other than close connections with government officials, and supported the studies views on BMI. Additionally, BMI optimization was more feasible if top managers took a balanced approach to social capital as their skillsets can suppress or cultivate BMI.

In addition to top managers, middle managers also played a role in social capital development within firms. A middle manager's role was different than that of a top manager as they give and receive direction and are closer to the day-to-day operations of the business (Stoker, 2006). According to Ahearne, Lam, and Kraus (2014), middle managers work as a type of inter-mediary level between employees and senior managers. Additionally, social capital was considered unique to the type of behaviors that the middle managers engage in. Middle managers can bridge gaps between various levels of management as they represent a key component of the communication structure within firms. The focus of Ahearne et al. (2014) was on regional sales managers, which can also bridge gaps between their respective firms and external business partners as well, due to the mobility of their job. Due to these parameters, the informational social capital of the middle managers with downward influence was able to be tested at the regional level. The reputational social capital was measured by the amount of upward influence behavior that the middle manager could assert upon his peers and senior members of management.

A 7-point Likert scale questionnaire that gathered responses from 43 sales directors with a 100% participation rate and 285 sales managers with a 94% participation rate was utilized in this study. The findings demonstrate that both information and reputational social capital of managers in the middle rung influence the performance of either the upper or lower influence behaviors, but not both simultaneously.

The responses to the questionnaire within this study, adapted from Jones and Taylor (2012), reflected loyalty to firms. This loyalty was based on social capital they have built with the firm. These studies reflect the importance of management, on multiple levels, demonstrating skills in social capital development and the affect it has on firm performance. Additionally,

these studies present the importance of internal and external social capital with not only members of the internal team, but firm partners and the consumer base at large.

Social Capital in the Supply Chain

According to Cousins, Handfield, Lawson, and Petersen (2006), social capital within the supply chain exists in the close interactions that are created between trusted exchange partners within the buyer and seller relationship. This concept, applied to the buyer/seller relationship was defined by Cousins et al. (2006) as supply-chain relational capital. A study conducted by Cousins et al. (2006) compares the relationships between formal social mechanisms, informal social mechanisms, social capital and supplier relationship outcomes. The study targeted 750 manufacturing firms from The Chartered Institute of Purchasing and Supply (CIPS) database. 111 responses were usable yielding a 14.8% response rate.

The study concluded that formal social mechanisms did not necessarily lead to social capital. There was much direction, goal setting resources and effective leadership needed to aid formal social mechanisms. Informal mechanisms, such as relationship building, must be maintained to continue effectively. Social capital was deemed an important factor according to the results as accurate performance outcomes, such as improved innovation, improved processes and lead time reduction were all positively influenced by social capital.

According to Johnson, Elliott, and Drake (2013), supply chain vulnerability has been a consistent challenge for efficiency and costs. Natural disasters, globalization, political unrest and loss of suppliers make it more and more necessary for supply chains to become more resilient. Johnson et al. (2013) assert that the long-term success of the supply chain was reliant on trust, shared goals and relationships that are beneficial to all parties involved. An evaluation of the relationships of supply chain resilience (SCRES), supply chain management (SCM) and social capital was completed.

According to Johnson et al. (2013), these relationships can be assessed by the amount of mutual respect, trust, and interaction that exists between the various firms. In the study conducted by Johnson et al. (2013) the three dimensions of social capital, structural, relational and cognitive are examined as potential sources for SCRES. Data for the study were collected directly following a train derailment. Data collected came from television news, newspapers, magazines, SCM literature, documentaries, recovery management reports, contractor evidence and logs and interviews with those involved. Results of the study conclude that social capital served as a facilitator to the formative capabilities of SCRES and the resourceful response in times of crisis.

According to Min, Kim and Chen (2008), the supply chain environment has become increasingly more competitive as globalization has made it more difficult for firms to meet the changing needs of their customers. The study by Min et al. (2008) proposes that this difficulty falls on managers and that SCM practices cannot be totally effective if critical relationships do not exist amongst supply chain partners. According to Min et al. (2008) these relationships are measureable through measuring the magnitude of social capital within the supply chain. Additionally, Min et al. (2008) goes on to assert that these behaviors enhance the acquisition and sharing of information and knowledge, creating a more efficient supply chain environment through forward and reverse channels. Min et al. (2008) concluded, in their study, that social capital drives SCM behaviors and is necessary for improved business performance in supply chains.

Li et al. (2006) assert that SCM practices such as strategic partnerships with suppliers and relationships with consumers are critical for firms to reach their ultimate goal of improving organizational efficiency and overall performance. Additionally, Li et al. (2006) assert that

understanding these SCM practices can have a direct impact on the success of the firm and help in the creation of a sustainable competitive advantage.

Social Capital in Customer Loyalty

According to Delcourt, Gremler, Riel, and Birgelen (2013), customer loyalty is the strong commitment of a consumer to a particular firm, service or product, then and in the future.

Sulistyo, Mutamimah, and Triwikaningrum (2015) assert that social capital was an important factor in determining the needs of an organization and facilitates the sharing of information.

Additionally, Sulistyo et al. (2015) state that the relational dimension of social capital forms networking between firms and consumers that will ultimately lead to a high level of loyalty toward the firm.

In a study conducted by Sulistyo et al. (2015) it was determined that relational and structural social capital have a substantial effect on customer loyalty in banking firms.

A questionnaire distributed to customers of Islamic Banks in Central Java was utilized to collect study samples. A response rate of 88.89% or 80 respondents was obtained from a sample size of 90 customers. Data was collected by surveyors within the banks and was done immediately after or before transactions.

Sulistyo et al. (2015) assert that high loyalty levels show confidence in the firm and a willingness to visit the location repeatedly. Additionally, the willingness of firms to take the suggestions of consumers and related firms product offerings will encourage consumers to repurchase products as well as build confidence in the consumer base to recommend the firm to others. Sulistyo et al. (2015) demonstrate the potential success of firms who can build relational and structural capital, which ultimately leads to a relationship with its consumer base that encourages loyalty to the firm and the products it offers.

According to Jeong (2011) the perception of the actions taken by local retailers can influence spending behaviors of the local consumer base. The reliance of the customer in a rural setting, such as the one presented by Jeong (2011), is pivotal to the survival of the rural retail firm. A study conducted by Jeong (2011) examines how social capital influences this environment as well as its relationship to the motivations and perceptions of its consumer base. Through the examination of social capital and consumer buying motives, Jeong (2011) examined consumer loyalty to rural retail firms. For the study, Jeong (2011) broke down motivation into three constructs; moral, social and economic. Jeong (2011) also broke down social capital into three constructs; structural, relational and cognitive. Jeong (2011) incorporated an SEM for accuracy to test the data. The results of the study indicated that relational capital was the only social capital construct that increased moral motivation and cognitive capital was the only social capital construct to influence social motivation. Jeong (2011) asserts that consumers are more motivated to shop in a retail firm when more personal relationships are present with the firm. Through these relationships trust and norms of reciprocity are established.

A lack of face-to-face interactions has created a gap in long-term relationships in e-commerce. Social capital's existence in e-commerce has been questioned because face-to-face interactions are absent. However, some researchers are stating that social capital not only exists in e-commerce settings, but is a critical determiner of a customer's loyalty (Kaczorowska-Spychalska (2017). According to Wang and Chiang (2009), the three critical factors of social capital may vary in e-commerce, but they are still present. The relational dimension focuses on trust. This variable must be stronger than in a face-to-face setting as the digital marketplace only allows consumers to see product pictures, but does not allow the consumer to make physical contact with the product they intend to buy. This can be a big step for some consumers as they transition from the physical retail locations where most products can be physically experienced.

According to Kaczorowska-Spychalska (2017) states that the omnichannel environment has created a need for marriage of companies branding and technological innovation that allows a digital connection with the consumer. This environment should be consumer experience driven as, even in this digital environment, firms still strive to create the level of relationship needed to generate customer loyalty. Conlon (2014) asserts that the ultimate goal of the omnichannel environment is to make its use easy for the consumer and help to create cohesion in the consumer shopping experience.

According to Chen, Huang and Davison (2016), the level of social capital with buyers utilizing e-commerce platforms was a critical factor when determining e-commerce consumer loyalty. Additionally, Chen et al. (2016) assert that gaining the loyalty of buyers in the digital marketplace was crucial for the long-term success of e-firms. In addition to the three critical dimensions of social capital, Chen et al. (2016) added three more for use in this study. To examine the construct of website quality, the dimensions of information quality, system quality, and service quality were added.

Data for the Chen et al. (2016) study was collected from users of TaoBao from fifteen tangible product categories. The study rendered a 41% response rate as 307 usable surveys were returned. A two-stage methodology was employed to breakdown the data along with a PLS statistical tool. The results of the study yielded interesting results as, in lieu of face-to-face interaction, the website designs of the users positively influenced the creation of social capital. Additionally, the study demonstrates that enhancing seller's websites and the existence of social capital between the consumer and the seller are requirements in the long-term development of customer loyalty. According to Kaczorowska-Spychalska (2017), omnichannel retail has truly evolved multichannel retail into the seamless experience of the omnichannel environment due to its focus on the consumer relationship.

Wolter, Bock, Smith and Cronin (2017) examined what creates true consumer loyalty vs. latent consumer loyalty. Wolter et al. (2017) labeled customer loyalty as a series of ongoing behaviors directed toward a particular object. An interesting finding of their research demonstrates that the rate of return on immediate satisfaction decreases as the length of the relationship with the consumer increases. Customer loyalty's strength therefore is more reliant on social capital, and the bonds that it affords, in the long term and less reliant on short-term, immediate satisfaction. Additionally, Wolter et al. (2017) illuminate the flipside of the coin by pointing out that those who shop out of convenience could be swayed by simple satisfaction as the choice to spend is not based on relationship or loyalty to the firm.

There is much support in both the customer loyalty literature as well as the SCI literature that suggests social capital is a fundamental component of both of these variables. Additionally, there is much support that both SCI and customer loyalty, support firm performance. Various industries from banking to manufacturing have been discussed and how SCI and customer loyalty are influenced within these areas. This study will take these concepts and apply them to the retail space. The changes of focus in this area, through the creation of omnichannel networks and new strategies on gaining customer loyalty, can be supported by this proposed research.

Summary

Although definitions of SCI can vary by author, commonalities in their objectives are apparent. Woods (2016) asserts that SCI is defined as a close alignment/coordination of the necessary parts within a supply chain and Kim (2013) defines SCI as the degree to which a firm operates with other firms to propagate the flow of decisions, information, cash, and merchandise. The ultimate goal of gains in firm performance, at every level, is a common one.

According to Childerhouse et al. (2011), SCI does positively influence firm performance. Childerhouse et al. (2011) implemented an 8-year international field study following over 50

products within their respective supply chains in order to determine this. The importance of SCI in sustaining a competitive advantage is apparent. Supply Chain Integration (SCI) was determined to be one of the most important factors when creating a competitive advantage through internal and external networks (He & Lai, 2012; Cousins & Menguc, 2006). There are still industries that can benefit from SCI but have not done so. Gimenez et al. (2012), stated that high supply complexity situations such as retail firms were a prime candidate for SCI implementation. Understanding that retail firm supply chains are a prime candidate for SCI implementation helped to guide the initial focus of this dissertation.

It appears that the path for SCI integration begins internally, within the firm and then branches out to its external partners. Long-lasting relationships, which is a form of relational capital, help facilitate this integration and alignment of supply chain objectives. Relational capital is one of the three key dimensions of social capital, affirming the importance of social capital in the cultivation of these processes. According to Cousins et al. (2006), social capital within the supply chain exists in the close interactions that are created between trusted exchange partners within the buyer and seller relationship. Zhang et al. (2015), demonstrate a model for successful implementation of SCI that suggests it should begin internally sound first and then extend to the partners they have aligned with throughout their supply chain. Integration of the supply chain ensures positive experiences for not only the firms but for consumers and business partners as well.

According to Fayezi and Zomorodi (2015), integration of relationships within the supply chain allows for a more flexible supply chain through shared ideas. Flexibility within the supply chain, helps firms to better meet the needs of the consumer as various supply chain partner's ideas are brought forward and a more diverse consumer audience can be reached. According to

Singh and Raghuvanshi (2014), customers are brilliant, talented and busy, and processes within retail firms should work for them. The creation of a seamless experience is the ultimate goal.

Consistent supply-chain integration processes should be held to no less of a standard. Supply-chain processes should not hinder the process but in fact make this a reality and aide in continued customer satisfaction and customer loyalty. Noskova and Romanova (2015), state that the goal of modern marketing was to create a loyal customer base through the implementation of long-term relationships with its consumers. Long-term relationships create gains in profit as individual transactions evolve into reoccurring transactions that maximize profitability.

According to Delcourt et al. (2013), customer loyalty is the strong commitment of a consumer to a particular firm, service or product, then and in the future. The strong relationships and commitments created are results of the overall consumer experience created within firms (Smart, 2016). This experience is reliant on every level of management (Guo et al. 2013; Stoker, 2006), as well as associates within the firm (Jones & Taylor, 2012). This experience is inclusive of all interactions that occur within retail firms. Creating a relationship between the consumer, the firm and its employees helps to increase relational capital, ultimately increasing loyalty to the firm. Additionally, Sulistyoyo et al. (2015) state that the relational dimension of social capital forms networking between firms and consumers that will ultimately lead to a high level of loyalty toward the firm.

SCI and customer loyalty are both important factors when considering firm performance. In addition to the supply chain directly impacting customer loyalty, a common factor between these two variables is social capital as it is significant to the success of both. The research presented by the studies in this chapter provide an in depth view of the relationships between these variables and the factors that ultimately determine their success or failure. SCI's

implementation, efficiency, and focus are significantly influenced by social capital and customer loyalty's creation, sustainability and magnitude are significantly influenced by social capital.

CHAPTER 3. METHODOLOGY

Introduction

This study examined the relationship of social capital, SCI and customer loyalty on retail firm performance. Due to research, within the last five years, supporting social capital's assistance with SCI implementation success and firm performance Yim and Leem (2013), and successes of social capital in service firm customer loyalty Jones and Taylor (2012), continuation of this research directed toward the retail environment appeared to be a logical next step. The literature review identified a gap in the exploration of social capital's relationship to retail firm's SCI implementation, as well as its relationship to customer loyalty, and firm performance. Therefore, understanding these factors will aid retail firms in understanding their customer base as well as their suppliers. The purpose of Chapter 3 was to provide design methodology, population, sampling, setting, data collection, instrumentation, hypotheses, data analysis, validity, reliability and ethical considerations of this study and the remainder of Chapter 3 is presented in that order.

Design and Methodology

This study utilized an explanatory, quantitative methodology based on research questions, utilizing inferential statistics with information gathered from two five-point Likert

scale questionnaires. A PLS-SEM instrument was used to determine significance of the data. The PLS-SEM was utilized to perform a non-iterative application of a partial least squares regression to obtain outer weights, loadings, and structure model relationships for the latent and the manifest variables within this study. Additionally, the study applied a bootstrap re-sampling procedure to evaluate the statistical significance of the path coefficients. PLS-SEM was chosen for several reasons. According to Chin (1998), PLS constructs can be measured by a single item and do not have the four-question per construct requirement of covariance based approaches and within the questionnaires being utilized for this study, there were varying numbers of questions relating to the various constructs. Hair, Ringle, and Sarstedt (2011) stated that PLS handles non-normal distributions very well. Additionally, Chin (1998) asserts that PLS accounts for measurement errors and is more accurate in its estimations of effects.

The questionnaire that was utilized, for the supply chain manager portion of the population, was pretested on supply chain managers. Feedback from these managers was utilized to identify unnecessary or repetitive questions that may have needed revision or removal to strengthen the readability and quality of the survey (Cronbach & Meehl, 1955; Straub, 1989). The questionnaire that was utilized for the retail consumer population was constructed from previous studies related to the variables being tested (Zeithaml, Berry & Parasuraman, 1996; Mitra & Lynch, 1995; Cote & Healy, 2001; Uzzi, 1997; Ashforth & Mael, 1989; Bansal & Taylor, 1999; Sharma & Patterson, 2000; Ping, 1993).

The two research questions identified in Chapter 1 were used to guide the research in determining the relationship between social capital, SCI and customer loyalty. This study examined the strength of the relationship between the three aforementioned variables, using information gathered from retail consumers as well as supply chain professionals within the retail industry supply chain of the Northeastern United States.

Population and Sampling

A total of 405 participants were chosen as the total population for this study. The population numbers were generated by Qualtrics to reach an acceptable number of valid responses. A population of 315 participants was collected from the retail supply chain management sector (SCM) in the Northeastern United States of which there were 80 valid responses, yielding a usable response of 25%. SCM's within the retail sector was chosen as it met the parameters set forth by the study to determine the relationships between social capital and SCI within retail firm performance. The intent was to acquire a sampling of SCM professionals from the various retail industry supply chains offering groceries, apparel, and home goods.

Additionally, a population of 90 participants was chosen within the Northeastern United States retail firm consumer base of which there were 80 valid responses, yielding a usable response of 88.89%. Retail firm consumers were chosen as this met the parameters set forth by the study to determine the relationships of social capital and customer loyalty on retail firm performance. The intent was to acquire a sampling of retail firm consumers from the various retail industries: grocery, apparel, and home goods, as all categories of goods, are found in various retailers. The sampling was conducted within the Northeastern portion of the United States as this helps to be inclusive of a more ethnically diverse population, as according to Wells (2015), New York and Boston were listed in the top 20 most ethnically diverse cities in the United States. Additionally, the population density in the Northeast, according to the U.S. Census Bureau (2013), estimate the population of the Northeast totaled 55,943,073. With an average of 345.5 people per square mile, the population density of the Northeast helped to guarantee a usable response size.

According to Ringle, Sarstedt, and Straub (2012), PLS-SEM modeling samples are quite small. Hair, Sarstedt, Hopkins, and Kuppelwieser (2014) agree with the assertion that the samples are small, but state that the population size should be equal to the larger of the following:

“Ten times the largest number of formative indicator used to measure a single construct;
or Ten times the largest number of the inner model paths directed at a particular construct
in the inner model” (p. 287) (Barclay, Higgins & Thompson, 1995),

however, this guide did not take into account the complexity of the study nor did it consider the reliability, number of indicators and other factors that affect power (Henseler, Ringle & Sinkovics, 2009). Under these considerations, the minimum sample size would have to be 30. In Figure 1, located on page 7, the largest number of inner model paths directed at a single construct is three.

To choose a valid population size, comparable studies that used PLS-SEM were examined. Yim and Leem (2013) sent out 1,000 questionnaires, with a usable response of 420 or 42% and Jones and Taylor (2012) sent out 4,000 questionnaires, with a usable response of 337 or 8.4%. Considering these two studies, the usable average response was 378.

Additionally, G-Power software was utilized to determine a suggested sample size. According to Mayr, Erdfelder, Buchner, and Faul (2007), G-Power is a free general power analysis program for prior, posthoc and compromise power analyses for t-tests, F-tests and χ^2 -tests. A sample size of 68 is the recommended sample size of G-Power, using Dattalo (2008) settings, with an effect size $f^2 = 0.15$, $\alpha = 0.05$, power = 0.8 and 2 predictors. Taking all of these factors into consideration, the chosen population size for this study was 405 participants or 315 participants for the Retail SCM survey and 90 participants from the Retail Consumer survey. A 22% participation rate would have provided the suggested 68 participant sample size for the

Retail SCM survey of which a 25% usable rate, 80 participants, was acquired and a 75% participation rate would have provided the suggested 68 participant sample size for the Retail Consumer survey of which an 88.89% usable rate, 80 participants, was acquired.

Setting

The participants selected for this study were recruited by Qualtrics and were provided as part of the sampling strategy of this study. Participants in the Northeastern United States SCM population was selected based on being in management within retail firms supply chains, age, and geographical location. Participants in the Northeastern United States retail firm consumer population was selected by retail firm participation, age, and geographical location. The broader implications of this study, in regards to practitioners, is that it provides a statistical analysis of the relationship that social capital has within retail firm customer loyalty and within the retail firm supply chain. In examining this relationship, the body of knowledge in this area is expanded for future practitioners to build upon.

Data Collection

Data was collected by Qualtrics, utilizing two five-point Likert scale questionnaires ranging from disagree strongly (1) to agree strongly (5). Data was collected over a 1-week period from a sample of 315 SCM professionals and 90 retail consumers in the Northeastern United States. The data collected covers several variables related to the aforementioned research questions within chapter 1 of this study. All variables that were examined were included in the questionnaires within this study. The study does not present any information which would identify the participants and the respondents were assigned a numerical identifier for anonymity. Access to the data is/will be password protected and stored on a secure web server by Qualtrics. The research is/and will be following the privacy policy as set forth by Qualtrics.com. The data is/will also be stored on a password protected personal computer and is/will be kept in a locked

safe at a private residence. Data is/will be stored for a seven-year retention period and will then be digitally destroyed and removed from all sources.

Instrumentation

One of the two research instruments being used in this study measured three dimensions of social capital: relational, structural, and cognitive for social capital, SCI, and FP. The relational dimension was measured by the level of commitment of SCM professionals. The structural dimension was measured by the level of interaction amongst firms within the retail supply chain. The cognitive dimensions were measured through shared values amongst SCM professionals. The instrument consisted of a five-point Likert scale to determine the relationship between social capital and SCI, utilized by Yim and Leem (2013) and a validation of the hypotheses utilizing the PLS-SEM.

The second research instrument used in this study measured three dimensions of social capital: relational, structural and cognitive for social capital, customer loyalty, and firm performance. The relational dimension was measured utilizing items from Uzzi's (1997) study reviewing single dynamic relationship ties. The cognitive dimension was measured utilizing a four-item reflective scale developed from Ashforth and Mael's (1989) review of organizational identity. The structural dimension was measured by the existence of multiple ties or level of relationship to the retail firm. The instrument consists of a five-point Likert scale to determine social capital's relationship to customer loyalty, utilized by Jones and Taylor (2012), and a validation of the hypotheses utilizing the PLS-SEM.

Hypotheses

The hypotheses of this study are guided by the studies research questions.

Research Question 1. What is the relationship between social capital, implementation of SCI and firm performance?

Null Hypothesis 1. There is not a significant relationship between social capital, SCI implementation and firm performance.

Alternate Hypothesis 1. There is a significant relationship between social capital, SCI implementation and firm performance.

Research Question 2. What is the relationship between social capital, customer loyalty and firm performance?

Null Hypothesis 2. There is not a significant relationship between social capital, customer loyalty and firm performance.

Alternate Hypothesis 2. There is a significant relationship between social capital, customer loyalty and firm performance.

Data Analysis

The data analysis was used to answer the two aforementioned research questions and the presented hypotheses to determine the relationship between social capital and SCI as they relate to firm performance, as well as social capital and customer loyalty.

The data were tested for normality and adjustments made depending on the deviation. A total of three variables were tested. The three dimensions of social capital (relational, structural and cognitive) were tested against SCI and customer loyalty. The study utilized PLS-SEM to identify correlation coefficients between the multiple sets of variables. One of the variable sets under examination was behavioral loyalty, attitudinal loyalty, service quality, alternative attractiveness, switching costs, cognitive social capital, and relational social capital. The other variable set under examination was supply chain relational capital, supply chain structural capital, supply chain cognitive capital, SCI and firm performance.

Validity and Reliability

The research provided a framework that is credible and reliable in promoting collegiality and a foundation for continued research while contributing to the existing body of knowledge. In regards to the statistical analysis tool used to test the data, SmartPLS Version 3, a PLS-SEM tool, was utilized. In regards to the instruments being utilized, they came in the form of questionnaires from two studies, Jones and Taylor (2012), which was created from a culmination of various authors. Reliability of this study is demonstrated through all-composite reliabilities being > 0.8 ; all AVEs exceeded 0.5 demonstrating evidence of convergent validity. Yim and Leem (2013), validity is demonstrated through Cronbach's results, which can be seen in Table 1 on page 18.

According to Heale and Twycross (2015), validity defines the extent to which a subject of study is accurately measured within a quantitative framework and reliability is a reflection of a research instruments accuracy. Richter, Cepeda, Roldán, and Ringle (2016) assert that, during the past decade, the broader research community has hailed PLS-SEM as being a widely accepted, multivariate analysis method that has helped thousands of researchers substantiate their theoretical research projects. Additionally, the PLS-SEM tool is referred to by Hair et al., (2011) as a cure-all when utilized correctly. Utilizing this data analysis tool yielded accurate results.

Chang, Shen, and Liu (2016) utilized PLS-SEM in their research of user trust in mobile social network reliance. Chang et al. (2016) tested for unidimensionality, which is indicated by having a Cronbach's alpha (α) value and composite reliability (CR) value greater than 0.7. The study's model exceeded the threshold of Cronbach's α as well as the CR value. To ensure validity, Chang et al. (2016) chose their questions from literature reviews and modified the items to fit the context of the study. Also, Chang et al. (2016) administered a pretest to make sure that questions were valid and understood. Findings, from the study, led the researchers to modify

questions to improve both the readability and reliability before being used in a formal survey, which ultimately led to the removal of items with low correlation values.

Rahman, Memon, Abdullah, and Azis (2013) utilized PLS-SEM to examine the relationship of four groups of variables to cost overrun in the construction industry. A quantitative model was developed using a structured, 5-point Likert scale questionnaire. The study's minimum sample size, according to PLS-SEM parameters, was 40 as the largest number of structural paths was 4. Rahman et al. (2013) utilized convergent validity and discriminant validity to test the validity of their model. The CR and Cronbach's α should exceed 0.7 for convergent validity and the average variance extracted (AVE) should exceed 0.5. In this study CR, AVE and Alpha values all exceeded necessary thresholds and the discriminant validity, determined by the square root of the AVE having a larger value than the correlation value shared with other constructs, was also proven. The study determined that three of the four groups demonstrated a significant relationship to cost overrun.

In the same manner as the two aforementioned studies, being Chang et al., (2016) and Rahman et al., (2013), this study is utilizing a 5-point Likert scale questionnaire, tested for Cronbach's α , CR and AVE, and is utilizing questionnaire's that have been properly vetted for accuracy. The questionnaires demonstrate not only the questions being utilized but also the constructs to which each question applies.

The instrument that was utilized for the retail consumer portion of the population for this study is from the Jones and Taylor (2012) study. Five constructs (behavioral loyalty, attitudinal loyalty, service quality, alternative attractiveness, and switching costs) with a total of 16 questions measured customer loyalty, four questions measured cognitive social capital, three questions measured relational social capital and two questions measured structural social capital. The validity and reliability of this instrument were substantiated through a thorough review of

the literature, as information gathered from the work of these authors directly influenced the creation of the questions within the instrument.

The instrument that was utilized for the SCM portion of the population for this study is from the Yim and Leem (2013) study. Supply chain relational capital was measured through four constructs (commitment, socialization, trust and reciprocity) through a total of 18 questions, supply chain structural capital was measured through two constructs (network use and network appropriateness) through a total of four questions, supply chain cognitive capital was measured through two constructs (shared fate and common fate) through a total of nine questions, supply chain integration was measured through three constructs (information sharing, resource sharing and collaboration) through a total of 12 questions and firm performance was measured through three constructs (innovation oriented, operation oriented and growth-oriented) through 10 questions. The validity and reliability of this instrument were substantiated through previous research.

“The relational dimension was measured through commitment (Heide & Miner, 1992; Krause & Handfield, 2007; Koufteros & Cheng, 2007; Avery, 2010), socialization (Gupta & Govindarajan, 2000; Cousins, Handfield, Benn Lawson & Peterson, 2006; Avery, 2010), trust (Coleman, 1988; Nahapiet & Ghoshal, 1998; Tsai & Ghoshal, 1998; Putnam, 2000; Inkpen & Tsang, 2005; McEvily & Marcus, 2005; Liu, Luo & Liu, 2009; Avery, 2010), and reciprocity (Nahapiet & Ghoshal, 1998; Coleman, 1988; Krause & Handfield., 2007; Lawson, Tyler & Cousins, 2008; Avery, 2010). The structural dimension was measured through interaction among firms in a supply chain (Nahapiet & Ghoshal, 1998; Inkpen & Tsang, 2005; Luo, Griffith, Sandra & Yi-Zheng, 2004; Avery, 2010). Further, the cognitive dimension was measured through shared values (Hofstede & Bond,

1988; Tsai & Ghoshal, 1998; Krause and Handfield, 2007; Hult, Ketchen & Slater, 2004; Nahapiet & Ghoshal, 1998) and common fate between firms (Perrone, Zaheer & McEvily, 2003; McEvily & Marcus, 2005; Avery, 2010)” (Yim & Leem, 2013, p. 329).

Both validity and reliability were established through the research tools utilized within the study, the method for collecting data, statement of assumptions and limitations, and protected coding of the collected data.

Ethical Considerations

Ethical considerations were of the utmost importance in this study. Special consideration in not identifying the particular retail firms referenced by the respondents aided in the prevention of bias. Written permission was obtained for the instruments being utilized. Similarly, the online service provider collected an acknowledgment and tacit permission electronically from each survey participant, as the participants were given the option to opt-out of responding.

The data collected from Qualtrics was collected so that the retail industry would be focused on broadly, removing the potential for bias. Survey participants were assigned a numerical identifier for each collected survey which helped to maintain anonymity throughout the study. The online survey provider did not forward personal information of participants. Utilizing this third-party resource for access to the study’s population, the risk of conflicts of interest associated with the survey and the participants was limited. The use of a third party surveyor and anonymous identifiers helped to protect organizations and individuals in the study.

A private computer will maintain participant names and other information as provided by the ISM. This data will be stored for seven years. At that point, all media holding the data will be discarded without a National Institute of Standards and Technology (NIST) 800-88 approved data sanitation method to protect that data is not utilized outside the confines of its intended use.

CHAPTER 4. RESULTS

Introduction

The purpose of this study is to examine the significance of the relationships between social capital and SCI as well as the significance of the relationships between social capital and customer loyalty, and how this relates to firm performance. This study examined several specified constructs that form these variables, to examine these relationships. These constructs were created, approved and utilized by previous studies (Yim and Leem, 2013; Jones and Taylor, 2012) and are in this one. This study utilizes these instruments to examine how these variables demonstrate significant relationships, as they relate to members of management within the retail industry supply chain and the retail consumer base. During this time of sales decline for physical retail locations (Adams, 2017; Fickenscher, 2017), understanding what drives customer loyalty, and logistical efficiency is pivotal to the revitalization of the retail industry brick-and-mortar industry. The constructs that are being examined help to demonstrate the importance of social capital's relationship to customer loyalty as well as social capital's relationship to critical supply chain relationships that help to build the customer experience within retail firms.

The rest of this chapter is divided into four sections. The first section presents the results of both surveys that were administered by Qualtrics to the designated sample populations. The second section provides a thorough descriptive analysis of the data collection results through SmartPLS and test for mediation using Sobel's mediation test. The third section provides an

analysis of the hypotheses presented in the study. The last section provides a summary of the results of the study.

Data Collection Results

Qualtrics was initially informed of the required 68 respondent participation for each questionnaire. Qualtrics was able to fulfill this request with a population of 315 participants for the retail supply chain management sector (SCM) questionnaire, of which there were 80 valid responses, yielding a usable response of 25% and a population of 90 participants was for the retail firm consumer survey of which there were 80 valid responses, yielding a usable response of 88.89%. Both of these totals exceed the required response rate of 68 and the suggested, usable response rate of 22%.

The response rate of the retail consumer survey was 90% as most of the respondents met the requirements set forth by the study, however of the 90 participants, four participants replied no in regards to the terms of the informed consent, two of which also responded no to the age requirement. Four participants responded no to meeting the age requirement of 18+ years of age. On the geographical portion, two participants responded they were from the Midwest (IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI) and one participant responded that they were from the West (AK, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY). The remaining usable sample for the study was 80 participants. These 80 participants were comprised of retail consumers, 18+ years of age, who live in the Northeastern United States (CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT) and shop at a retail firm location.

The response rate of the SCM survey was 25% as many of the respondents did not meet the specific criteria required for the study. Of the 315 participants, 12 participants replied no in regards to the terms of the informed consent, three of which also responded no to the age requirement. Six participants responded no to meeting the age requirement of 18+ years of age.

On the geographical portion, 207 participants responded that they did not work in the retail supply chain industry in the Northeastern United States (CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT) and 13 respondents stated that they did not work as a supply chain manager. The remaining usable sample for the study was 80 participants. These 80 participants were comprised of retail firm supply chain managers, 18+ years of age, who live and work as an SCM in the Northeastern United States (CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT).

Descriptive Analysis

Variable Codings

This study utilized many variables for each construct that have been drawn from the relevant literature. The survey instrument utilized for the retail consumer portion of the population is from the Jones and Taylor (2012) study. The five constructs representing customer loyalty were measured through relating 5-point Likert scale questions and coded as such, behavioral loyalty (BL1, BL2, BL3), attitudinal loyalty (AL1, AL2, AL3, AL4), service quality (SQ1, SQ2, SQ3), alternative attractiveness (AA1, AA2) and switching costs (SC1, SC2, SC3, SC4).

The three construct representing social capital were measured through relating 5-point Likert scale questions and coded as such, cognitive social capital (CSC1, CSC2, CSC3, CSC4), relational social capital (RSC1, RSC2, RSC3) and structural social capital (SSC1, SSC2).

The validity and reliability of this instrument were substantiated through a thorough review of the literature as information gathered from the work of these authors directly influenced the creation of the questions within the instrument. The mean and standard deviation for these variables are found in Table 2.

Table 2

Retail Consumer Mean and Standard Deviation Analysis of Each Measured Variable

Index	Mean	SD	n
AA1	4.1	0.81	80
AA2	4.1	0.77	80
AL1	4.1	0.78	80
AL2	3.6	0.82	80
AL3	3.8	0.90	80
AL4	3.7	0.86	80
SQ1	3.7	0.81	80
SQ2	3.7	0.86	80
SQ3	2.7	1.09	80
BL1	3.3	0.77	80
BL2	3.2	0.96	80
BL3	3.1	0.87	80
SC1	3.1	0.91	80
SC2	3.3	0.97	80
SC3	3.2	0.85	80
SC4	3.2	1.00	80
CSC1	3.3	0.76	80
CSC2	3.2	0.75	80
CSC3	3.4	0.84	80
CSC4	3.4	0.87	80
SSC1	3.5	0.91	80
SSC2	3.2	0.94	80
RSC1	3.1	0.92	80
RSC2	3.6	1.32	80
RSC3	2.6	1.36	80

The instrument that was utilized for the SCM portion of the population is from the Yim and Leem (2013) study. Supply chain relational capital was measured through four constructs, measured through relating 5-point Likert scale questions and were coded as such, commitment (COM1, COM2, COM3), socialization (SOC1, SOC2, SOC3, SOC4, SOC5, SOC6), trust (TRU1, TRU2, TRU3, TRU4) and reciprocity (REC1, REC2, REC3, REC4, REC5) through a total of 18 questions.

Supply chain structural capital was measured through two constructs, measured through relating 5-point Likert scale questions and were coded as such, network use (USE1, USE2) and network appropriateness (APP1, APP2) through a total of four questions.

Supply chain cognitive capital was measured through two constructs, measured through relating 5-point Likert scale questions and were coded as such, shared value (VAL1, VAL2, VAL3, VAL4) and common fate (FAT1, FAT2, FAT3, FAT4, FAT5) through a total of nine questions.

Supply chain integration was measured through three constructs, measured through relating 5-point Likert scale questions and were coded as such, information sharing (INF1, INF2, INF3), resource sharing (RES1, RES2, RES3, RES 4) and collaboration (COL1, COL2, COL3, COL4, COL5) through a total of 12 questions.

Firm performance was measured through three constructs, measured through relating 5-point Likert scale questions and were coded as such, innovation-oriented (INP1, INP2, INP3), operation oriented (OPP1, OPP2, OPP3, OPP4) and growth-oriented (GRP1, GRP2, GRP3) through 10 questions.

The validity and reliability of this instrument were substantiated through a thorough review of the literature, and several authors are noted as information gathered from the work of these authors directly influenced the creation of the questions within the instrument. The mean and standard deviation for these variables can be found in Table 3.

Table 3

Retail Supply Chain Mean and Standard Deviation Analysis of Each Measurable Variable

Index	Mean	SD	n
COM1	4.1	0.91	80
COM2	4.1	1.00	80
COM3	4.2	0.99	80
SOC1	3.9	1.28	80
SOC2	4.2	0.94	80
SOC3	4.3	0.86	80

SOC4	3.8	1.16	80
SOC5	3.6	1.36	80
SOC6	3.6	1.33	80
TRU1	3.0	1.58	80
TRU2	4.3	0.93	80
TRU3	4.3	0.95	80
TRU4	4.4	0.86	80
REC1	3.8	1.13	80
REC2	3.9	1.07	80
REC3	3.9	1.06	80
REC4	4.2	0.91	80
REC5	4.3	0.84	80
USE1	3.6	1.28	80
USE2	4.2	0.99	80
APP1	4.2	0.94	80
APP2	4.1	0.89	80
VAL1	4.1	0.93	80
VAL2	4.1	0.93	80
VAL3	4.3	0.84	80
VAL4	4.1	1.03	80
FAT1	4.0	0.86	80
FAT2	4.1	0.88	80
FAT3	4.2	0.86	80
FAT4	4.2	0.89	80
FAT5	4.2	0.90	80
INF1	4.1	0.87	80
INF2	4.1	1.03	80
INF3	3.9	1.02	80
RES1	4.0	1.10	80
RES2	3.8	1.21	80
RES3	3.7	1.19	80
RES4	4.1	0.99	80
COL1	3.9	1.03	80
COL2	4.1	1.00	80
COL3	4.2	0.81	80
COL4	4.1	1.12	80
COL5	4.0	1.02	80
INP1	4.3	0.81	80
INP2	3.9	0.96	80
INP3	4.2	0.89	80
OPP1	3.9	1.09	80
OPP2	4.3	0.90	80
OPP3	4.2	0.90	80
OPP4	4.3	0.91	80
GRP1	4.3	0.89	80
GRP2	4.2	0.83	80
GRP3	4.2	0.98	80

Significance Findings

The retail consumer questionnaire demonstrated findings similar to those of Jones and Taylor (2012), in their study of service firms. The data from the questionnaire was plugged into

Smart PLS 2.0, as demonstrated by Lowry and Gaskin (2014), and bootstrapping was utilized to test for a 95% confidence level. This level of confidence is achieved when numerical values are > than an absolute value of 1.96. Table 4 includes the levels of significance for each of the variables that measure social capital (SC). The data from the questionnaire was entered into Smart PLS 2.0, and a bootstrap test was conducted to test for significance. Relational social capital demonstrated a 6.409 level of significance to customer loyalty. Structural social capital demonstrated a 2.954 level of significance to customer loyalty. Cognitive social capital demonstrated a 2.383 level of significance to customer loyalty. All three variables demonstrated a significant relationship between customer loyalty and social capital.

The SCM questionnaire demonstrated findings reflective to those of Yim and Leem (2013), in their study of manufacturing firms. The data from the questionnaire was plugged into Smart PLS 2.0, as demonstrated by Lowry and Gaskin (2014), and bootstrapping was utilized to test for a 95% confidence level. This level of confidence is achieved when numerical values are > than an absolute value of 1.96. Table 4 includes the levels of significance for each of the

Table 4

Retail Consumer Survey T-Values (Significance)

Social Capital Construct	>1.96 = Significance to Customer Loyalty
Relational Social Capital	6.409
Structural Social Capital	2.954
Cognitive Social Capital	2.383

variables that measure social capital. The data from the questionnaire was entered into Smart PLS 2.0, and a bootstrap test was conducted to test for significance. Supply chain structural capital demonstrated a 2.375 level of significance to firm performance. Supply chain cognitive

capital demonstrated a 3.471 level of significance to firm performance. Supply chain relational capital demonstrated a 0.914 level of significance to firm performance. A significant relationship between supply chain structural capital and firm performance as well as a significant relationship between supply chain cognitive capital and firm performance was demonstrated. Supply chain relational capital did not demonstrate a significant relationship to firm performance. Supply chain integration showed a very strong level of significance, as a direct effect, at 31.568.

Table 5

SCM Survey T-Values (Significance)

Social Capital Construct	>1.96 = Significance to Firm Performance
Supply Chain Structural Capital	2.375
Supply Chain Cognitive Capital	3.471
Supply Chain Relational Capital	0.914
Supply Chain Integration	31.568

Mediation Findings

The SCM variables, commitment (COM1, COM2, COM3), socialization (SOC1, SOC2, SOC3, SOC4, SOC5, SOC6), trust (TRU1, TRU2, TRU3, TRU4), reciprocity (REC1, REC2, REC3, REC4, REC5), network use (USE1, USE2), network appropriateness (APP1, APP2), shared value (VAL1, VAL2, VAL3, VAL4), common fate (FAT1, FAT2, FAT3, FAT4, FAT5), information sharing (INF1, INF2, INF3), resource sharing (RES1, RES2, RES3, RES 4) and collaboration (COL1, COL2, COL3, COL4, COL5), were then put through the Sobel test for mediation (Sobel, 1982; Soper, 2017). The Sobel test for mediation requires that you input several variables which are derived from the Smart PLS 2.0 system (Lowry & Gaskin, 2014).

The values needed are the beta value of the independent variable to the mediator, the beta value from the mediator to the dependent variable, the standard error value from the independent variable to the mediator and the standard error value from the mediator to the dependent variable. The Sobel test variable that is derived from this should have an absolute value > 1.96 , and the two-tailed probability should have a value that is < 0.05 to demonstrate mediation. The T-statistic is then examined with and without the presence of the mediator to determine whether there is full or partial mediation. If the direct effect is > 1.96 without the mediator and in the presence of the mediator, then there is partial mediation. If the direct effect is < 1.96 in the presence of the mediator, then there is full mediation.

In regards to supply chain structural capital, when Sobel tested for mediation the Sobel Test Statistic came back at 2.695, which is > 1.96 and yielded a two tail probability value of 0.007 which is < 0.05 demonstrating a 95% level of confidence. These test results demonstrate that supply chain structural capital does mediate the relationship between supply chain integration and firm performance. Under the Smart PLS 2.0 test, the unmediated direct effect is 0.878 and when mediated is reduced to 0.586 and when bootstrapped the T-Statistic is 31.568 when unmediated and 5.469 when mediated, which demonstrates partial mediation. This is determined by the fact that when the variable is mediated and when not mediated the T-Statistic is still $>$ an absolute value of 1.96.

In regards to supply chain cognitive capital, when Sobel tested for mediation the Sobel Test Statistic came back at 5.323, which is > 1.96 and yielded a two tail probability value of 0.0000001 which is < 0.05 demonstrating a 95% level of confidence. This demonstrates that supply chain cognitive capital does mediate the relationship between supply chain integration and firm performance. Under the Smart PLS 2.0 test, the unmediated direct effect is 0.878 and when mediated is reduced to 0.268 and when bootstrapped the T-Statistic is 31.568 when

unmediated and 2.266 when mediated, which demonstrates partial mediation. This is determined by the fact that when the variable is mediated and when not mediated the T-Statistic is still $>$ an absolute value of 1.96.

In regards to supply chain relational capital, when Sobel tested for mediation the Sobel Test Statistic came back at 3.585, which is $>$ 1.96 and yielded a two tail probability value of 0.0003 which is $<$ 0.05 demonstrating a 95% level of confidence. This demonstrates that supply chain relational capital does mediate the relationship between supply chain integration and firm performance. Under the Smart PLS 2.0 test, the unmediated direct effect is 0.878 and when mediated is reduced to 0.420 and when bootstrapped the T-Statistic is 31.568 when unmediated and 3.107 when mediated, which demonstrates partial mediation. This is determined by the fact that when the variable is mediated and when not mediated the T-Statistic is still $>$ an absolute value of 1.96.

Analysis of Hypotheses

The Smart PLS 2.0 was utilized to run a partial least squares test on the research study hypotheses and answer the research questions. The analysis examined the relationship of social capital to customer loyalty, as well as, examining the relationship of SCI to firm performance and the mediating relationship of social capital between these two variables.

Hypotheses 1

Null Hypothesis 1. There is not a significant relationship between social capital, SCI implementation and firm performance.

Alternate Hypothesis 1. There is a significant relationship between social capital, SCI implementation and firm performance.

The results of the partial least-squares test indicate a statistically significant relationship between SCI and firm performance. This is evident in figure 4 as each t-statistic presents a significance value > 1.96 .

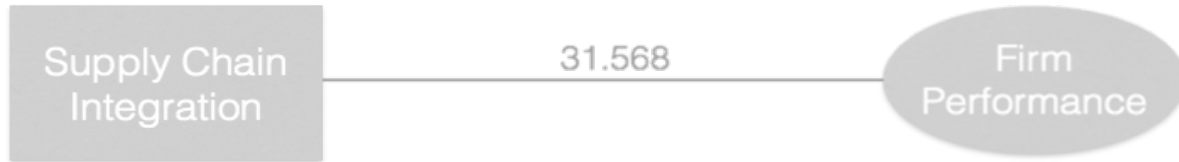


Figure 4. PLS significance results for SCI and Firm Performance.

The partial least squares test also indicated a statistically significant relationship between supply chain structural capital (SCSC) and supply chain cognitive capital (SCCC). However, the partial least squares test indicated that there was not a significant relationship between supply chain relational capital (SCRC) and firm performance. This is presented in figure 5 through t-statistic values for significance.

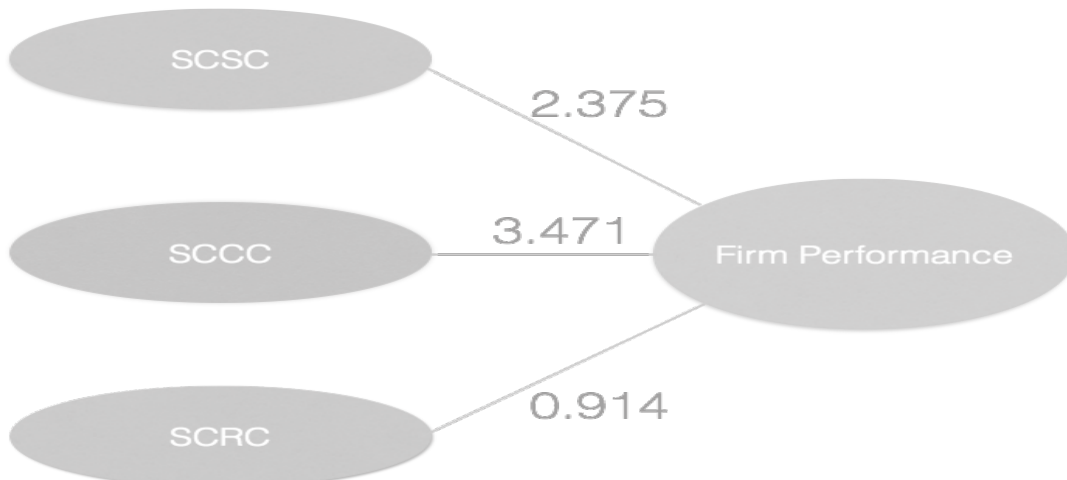


Figure 5. PLS significance results for SCSC, SCCC, SCRC and firm performance.

Additionally, the Sobel test for mediation determined that all three constructs related to social capital (SCSC, SCCC, SCRC) partially mediated the relationship between SCI and firm performance as all mediated effects were > 1.96 . Therefore, social capital does mediate the relationship between SCI and firm performance. This is presented in Figure 6.

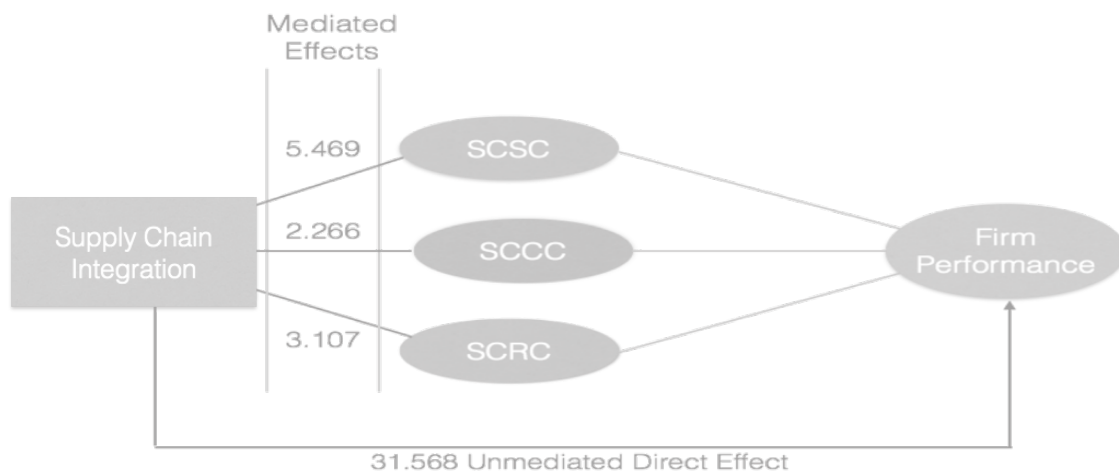


Figure 6. Sobel test for SCSC, SCCC, SCRC mediation of SCI and firm performance.

The implications of this portion of the study are pivotal as social capital is identified as a significant variable in retail firm logistics processes. These processes are far reaching as they provide products for consumers within retail-firms locations. Also, these processes play a role in dictating the returns procedures through reverse logistics processes. Understanding the necessity for social capital in this process provides potential for competitive advantage for retail firms.

Hypotheses 2

Null Hypothesis 2. There is not a significant relationship between social capital, customer loyalty and firm performance.

Alternate Hypothesis 2. There is a significant relationship between social capital, customer loyalty and firm performance.

The results of the partial least-squares test indicate a statistically significant relationship between social capital and customer loyalty. The partial least squares test indicated a significant relationship between relation social capital and customer loyalty, a significant relationship between structural social capital and customer loyalty, and a significant relationship between cognitive social capital and customer loyalty. This is evident in Figure 7 as each t-statistic presents a significance value > 1.96 .

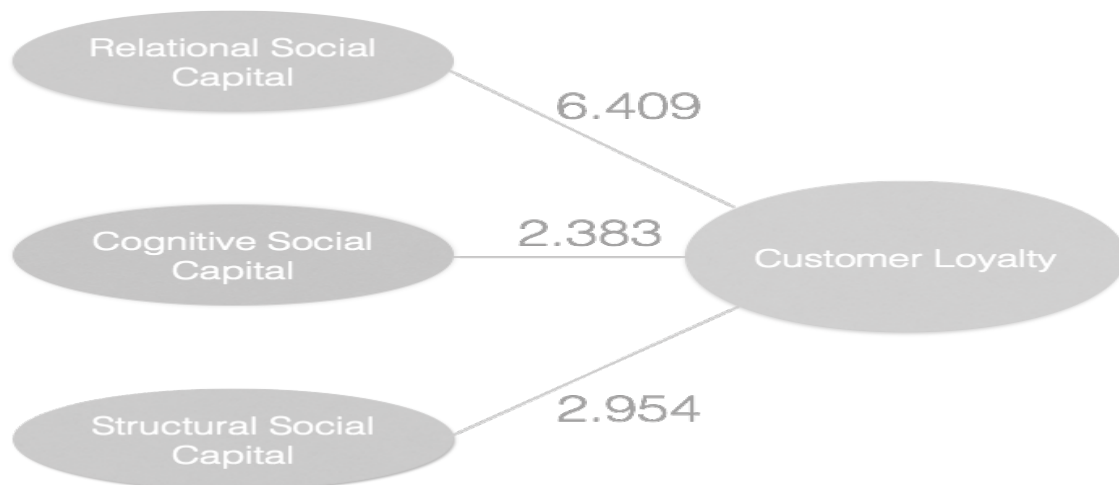


Figure 7. PLS significance results for SC and Customer Loyalty.

Although the SCM portion of the study was inclusive of firm performance, this portion of the study did not test for the direct significance between social capital and firm performance or the direct significance on customer loyalty and firm performance, as firm performance was an untested variable within the confines of this research instrument.

This fact does not detract from the content of this study however, because the literature has clearly addressed the direct relationship of customer loyalty and firm performance within retail firms (Alves, Rodrigues de Melo, Santos de Andrade, Lima Vasconcelos Macedo and Isaias de Souza, 2016; Anderson et al., 2004; Morgan and Rego, 2006; Reichheld, Markey, and Hopton, 2000; Reinartz, Krafft and Hoyer, 2004; Shah, Kumar and Kim, 2014). This study has now addressed the relationship between social capital and customer loyalty within retail firms, thereby eliminating the gap.

The implications of this portion of the study are pivotal as social capital is identified as a significant variable in retail firm customer loyalty. Understanding the factors that influence customer loyalty is pivotal to retail firm success. The importance of a long-term relationship with the consumer is shown to be a significant factor in this portion of the study.

Summary

This chapter included a thorough analysis of results of the methodological approach implemented in the research, examining the relationship between social capital and customer loyalty in retail firms, SCI and firm performance in retail firm supply chains and the mediating relationship of social capital on the relationship of SCI and firm performance in retail firm supply chains. Recruitment from the identified population and data collection was accomplished by employing the services of Qualtrics. Excel was utilized to chart the data downloaded from the Qualtrics website. Raw data was formatted, reviewed for completeness and factor analysis accomplished to meet the assumptions of normality.

A partial least squares statistical equation model was employed to determine whether the listed variables demonstrated statistically significant relationships. The Sobel test for mediation was utilized to determine mediation and full details of the partial least squares test, as well as tests for mediation, were illustrated and described.

The results indicated that there is a significant relationship between social capital and customer loyalty as well as a significant relationship between SCI and firm performance. The results demonstrated that there is also a significant relationship between supply chain structural capital and firm performance as well as a significant relationship between supply chain cognitive capital and firm performance. The results demonstrated there was not a significant relationship between supply chain relational capital and firm performance. This indicates that two of the three constructs that make up social capital demonstrate a significant relationship to firm performance. The results demonstrate that social capital does mediate the relationship between SCI and firm performance. These results answered Research questions 1 and 2 and resulted in Null Hypotheses 1 and 2 being rejected.

The implications of this research are substantial as social capital has been identified as an important factor throughout the retail supply chain and within customer loyalty of the brick-and-mortar retail firm consumer base. Social capital has been identified as a significant element from the beginning of the supply chain to the consumer, retail firms should respond by creating logistics policies, within their stores, which are inclusive of behaviors that support social capital. As brick-and-mortar retail continues to adapt to meet the substantial changes in the consumer base and compete with e-commerce retail, elements such as social capital, are becoming more and more important.

Chapter 5 includes further discussion of the results presented in this chapter. A further evaluation of the research questions is presented. This section is followed by a statement of the fulfillment of the research purpose. The next portion describes the contribution of this research to the business problem. Additionally, recommendations for further research and a conclusion is included.

CHAPTER 5. CONCLUSIONS

Introduction

According to Smart (2016), many factors play into the success or failure of generating customer loyalty within firms including the customer experience. Factors such as customer engagement during the shopping experience, customer relationships built over time (Rao & Kumar, 2013), as well as situations that involve firm's logistics processes such as product availability and experiences with product returns (Bouzaabia, Allard & Semeijn, 2013) influence the customer experience within firms. The findings of this study provide answers to the research questions that examine the role of social capital in the relationship of SCI and firm performance as well as social capital and customer loyalty within retail firms.

The purpose of this chapter is to evaluate the research questions and purpose based on the findings of the study, address the theoretical and practical contributions of the study and provide recommendations for future research. This chapter justifies the study by integrating the study's purpose with the study's findings and presents an argument as to why the study is relevant to scholars and practitioners. This chapter also presents new focus areas raised by the study's findings, which could be the topic of further research, thereby contributing to future retail firm and social capital focused research.

Evaluation of Research Questions

This dissertation examined the relationship of social capital on customer loyalty within retail firms. Additionally, this dissertation examined the mediating relationship of social capital

on SCI and firm performance with retail firm supply chains. The study's findings provide evidence-based responses to the following research questions that guided the study:

Research Question 1. What are the relationships between social capital, the implementation of SCI and firm performance?

Research Question 2. What is the relationship between social capital, customer loyalty and firm performance?

The research framework in Figure 1 demonstrates the tested relationship paths between social capital, SCI and firm performance. The research framework in Figure 2 demonstrates the tested relationship paths between social capital and customer loyalty, along with the connection of customer loyalty and firm performance, which is supported by existing literature (Alves et al. 2016; Anderson et al., 2004; Morgan & Rego 2006; Reichheld et al. 2000; Reinartz et al. 2004; Shah et al. 2014). For research question 1, the study sought to provide an answer to whether or not social capital mediates the relationship between SCI and firm performance, in retail firm supply chains. The results of the study indicate that social capital partially mediates the relationship between SCI and firm performance.

One can conclude from the findings of this study that the three constructs of social capital (relational capital, cognitive capital and structural capital) have a mediating effect on the relationship between SCI and firm performance. The results of the study also indicate that structural capital and cognitive capital have a significant direct effect on firm performance. This demonstrates that social capital has a significant direct and mediating effect on firm performance.

Research question 2 sought to provide an answer to whether or not social capital had a significant relationship to customer loyalty, in retail firms. One can conclude from the findings

of this study that the three constructs of social capital (relational capital, cognitive capital and structural capital) have a significant relationship to customer loyalty.

Fulfillment of Research Purpose

The purpose of this study was to examine the relationship of social capital on customer loyalty within retail firms as well as examine the mediating relationship of social capital on SCI and firm performance with retail firm supply chains. Two questionnaires were utilized in this study. One was provided to retail firm consumers, and another was provided to retail firm supply chain managers. A subsequent analysis of data collected using Smart PLS 2.0 was reminiscent of the previous findings of Yim and Leem (2013) (manufacturing industry) and Jones and Taylor (2012) (service firms); however, this study focused on retail firms. The results of this study have shed light on the importance of social capital throughout the retail firm supply chain, as well as in retail firm customer loyalty. Knowing that social capital is a significant factor from the supply chain, all the way to the consumer gives them a variable to consider when addressing the losses being experienced within their logistics processes. The significance findings and mediation findings sections of chapter 4 demonstrate the findings of this study.

The research findings are relevant within the industry of focus due to the guidance that they provide. The findings underline the importance of social capital within the retail firm supply chain as well as in the retail firm store locations. Social capital mediates the relationship of SCI to firm performance, while also demonstrating a significant, direct relationship to firm performance, within the retail firm supply chain. Additionally, social capital also demonstrates a significant, direct relationship to customer loyalty within retail firm store locations.

The understanding that social capital is necessary from the supply chain all the way to the retail firm customer can be beneficial in understanding part of the cause of the retail firm downturn that we currently see (Adams, 2017; Fickenscher, 2017).

Contribution to Business Problem

The business problem addressed in this study is that retail stores face potential firm performance issues and monetary loss due to a lack of relationships with their customer base (Wagner, 2015) and superficial treatment of processes within omnichannel retail logistics processes (Jeszka, 2014). This problem results in large monetary losses to retail firms on an annual basis (Blanchard, 2012; Penske, 2014). Through two questionnaires, and the subsequent PLS path modeling in Smart PLS 2.0 and Sobel test for mediation, this study validates how social capital attributes to the performance of retail firm supply chains while also demonstrating its importance to customer loyalty.

In validating social capital's role in the retail firm supply chain and retail firm locations, the study examined the three constructs that make up social capital (structural capital, cognitive capital and relational capital). The results demonstrate a significant, positive relationship between these three constructs and customer loyalty. The results also demonstrate a significant positive relationship between structural capital and firm performance and cognitive capital and firm performance in retail firm supply chains. Additionally, the results indicate that social capital mediates the relationship between SCI and firm performance in retail firm supply chains.

The results of this study indicate that social capital is a key factor in the success of retail firm operational/logistics processes as well as the existence of customer loyalty within retail firm stores.

Recommendations for Further Research

This study recruited participants from a population of retail firm consumers and retail supply chain managers in the Northeastern United States (CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT). The results of this study provided insight into a global problem effecting retail

by focusing on firms within a small section of the United States. Further investigation could focus on a comparative study of a different area of the United States.

Secondly, further research is needed to examine if social capital is a mediating factor between customer loyalty and retail firm performance. Understanding this relationship could further strengthen the results of this study as well as the necessity for social capital within retail firm strategy.

Conclusions

This study examined social capital and how it relates to supply chain processes and customer loyalty in retail firms. Previous studies have examined social capital in the supply chain of manufacturing firms (Yim & Leem, 2013) and social capital in the customer loyalty of service firms (Jones & Taylor, 2012). Both studies found significant results. However, these studies were not focused on retail firms or retail firm logistics. This study has focused on just that.

This study's contribution is presented as a potential solution to help offset the losses being incurred by brick-and-mortar retail firms, by identifying social capital as a significant factor from the retail firm supply chain all the way to customer loyalty within retail firm locations.

On a practitioner level, understanding social capital's role in the retail industry helps to understand its importance in the development of retail staffing/development and factors that promote the customer relationship as a factor in the financial losses currently being experienced in brick-and-mortar retail.

REFERENCES

- Adams, J. (2017). Retail decline spells trouble. *University Wire*. Retrieved from <https://westerncourier.com/38131/showcase/retail-decline-spells-trouble/>
- Ahearne, M., Lam, S. K., & Kraus, F. (2014). Performance impact of middle manager's adaptive strategy implementation: The role of social capital: Middle manager's adaptive strategy implementation. *Strategic Management Journal*, 35(1), 68-87. doi:10.1002/smj.2086
- Aksoy, L. (2013). How do you measure what you can't define? The current state of loyalty measurement and management. *Journal of Service Management*, 24(4), 356-381. doi:10.1108/JOSM-01-2013-0018
- Alves, A. C., Melo, K. C., Andrade, D. S., Lima Vasconcelos Macedo, C., & Souza, M.S. (2016). a percepção da satisfação pelos clientes de marcas próprias/the perception of customers' satisfaction of private labels. *Revista Pensamento Contemporâneo Em Administração*, 10(4), 114. doi:10.12712/rpca.v10i4.690
- Anand, N., & Grover, N. (2015). Measuring retail supply chain performance: Theoretical model using key performance indicators (KPIs). *Benchmarking*, 22(1), 135. doi:10.1108/BIJ-05-2012-0034
- Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing*, 58(3), 53-66. doi: 10.2307/1252310
- Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14(1), 20-39. doi: 10.5465/AMR.1989.4278999
- Avery, S. (2010). Impact of social capital on buyer supplier relationships in a multi-cultural context. The University of Texas, Arlington, TX. Retrieved from https://uta-ir.tdl.org/uta-ir/bitstream/handle/10106/4872/Avery_uta_2502D_10584.pdf?sequence=1
- Babin, B. J., Darden, W. R., & Griffin, M. (1994). Work and/or fun: Measuring hedonic and utilitarian shopping value. *Journal of Consumer Research*, 20(4), 644-656. doi:10.1086/209376
- Balaji, M. S. (2015). Investing in customer loyalty: The moderating role of relational characteristics. *Service Business*, 9(1), 17-40. doi:10.1007/s11628-013-0213-y
- Bansal, H. S., & Taylor, S. F. (1999). The Service Provider Switching Model (SPSM): A model of consumer switching behavior in the services industry. *Journal of Service Research*, 2(2), 200-218. doi: 10.1177/109467059922007

- Barclay, D. W., Higgins, C. A., & Thompson, R. (1995). The partial least squares approach to causal modeling: Personal computer adoption and use as illustration. *Technology Studies*, 2(2), 285-309. Retrieved from https://www.researchgate.net/publication/242663837_The_Partial_Least_Squares_PLS_Approach_to_Causal_Modeling_Personal_Computer_Use_as_an_Illustration
- Basnet, C. (2013). The measurement of internal supply chain integration. *Management Research Review*, 36(2), 153. doi:10.1108/01409171311292252
- Belás, J., & Gabcová, L. (2016). the relationship among customer satisfaction, loyalty and financial performance of commercial banks. *E+M Ekonomie a Management*, 19(1), 132. doi:10.15240/tul/001/2016-1-010
- Blanchard, D. (2012). Going in reverse can be the right direction. *Industry Week/IW*, 261(2), 43-44. Retrieved from http://www.industryweek.com/articles/going_in_reverse_can_be_the_right_direction_26594.aspx.
- Bouzaabia, O., Allard C. R., & Semeijn, J. (2013). Managing in-store logistics: A fresh perspective on retail service. *Journal of Service Management*, 24(2), 112-129. doi: <http://dx.doi.org/10.1108/09564231311323926>
- Burt, R. S. (2000). The network structure of social capital. *Research in Organizational Behavior*, 22, 345-423. doi:10.1016/S0191-3085(00)22009-1
- Cannièrè M. H., Pelsmacker, P. D., & Geuens, M. (2010). Relationship quality and purchase intention and behavior: The moderating impact of relationship strength. *Journal of Business and Psychology*, 25(1), 87-98. doi:10.1007/s10869-009-9127-z
- Chandrashekar, M., Rotte, K., Tax, S. S., & Grewal, R. (2007). Satisfaction strength and customer loyalty. *Journal of Marketing Research*, 44(1), 153-163. doi:10.1509/jmkr.44.1.153
- Chang, W., Ellinger, A. E., Kim, K., & Franke, G. R. (2016). Supply chain integration and firm financial performance: A meta-analysis of positional advantage mediation and moderating factors. *European Management Journal*, 34(3), 282-295. doi:10.1016/j.emj.2015.11.008
- Chang, S. E., Shen, W., & Liu, A. Y. (2016). Why mobile users trust smartphone social networking services? A PLS-SEM approach. *Journal of Business Research*, 69(11), 4890-4895. doi:10.1016/j.jbusres.2016.04.048
- Chen, X., Huang, Q., & Davison, R. M. (2016). The role of website quality and social capital in building buyers' loyalty. *International Journal of Information Management*, 1. doi:10.1016/j.ijinfomgt.2016.07.005
- Childerhouse, P., & Towill, D. R. (2011). Arcs of supply chain integration. *International Journal of Production Research*, 49(24), 7441-28. doi:10.1080/00207543.2010.524259

- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, 295(2), 295-336.
- Cojocariu, C. R. (2013). The reverse gear of logistics. *Revista De Management Comparat International*, 14(1), 153-164. Retrieved from <http://rmci.ase.ro/no14vol1/13.pdf>
- Coleman, J. C. (1988). Social capital in the creation of human capital, *The American Journal of Sociology*, 94, 95-120.
- Conlon, G. (2014). Omnichannel challenges and opportunities. *DM News*, 36(5), 14. Retrieved from <http://www.dmnews.com/multichannel-marketing/omnichannel-challenges-and-opportunities/article/336786/>
- Conzemius, A., & O'Neill, J. (2011). *The power of SMART goals: Using goals to improve student learning*. Bloomington, MN: Solution Tree Press.
- Cote, S., & Healy, T. (2001). The well-being of nations: The role of human and social capital. *Education and Skills*. Organisation for Economic Co-operation and Development, 2 rue Andre Pascal, F-75775 Paris Cedex 16, France.
- Cousins, P. D., Handfield, R. B., Lawson, B., & Petersen, K. J. (2006). Creating supply chain relational capital: The impact of formal and informal socialization processes. *Journal of Operations Management*, 24(6), 851-863. doi:10.1016/j.jom.2005.08.007
- Cousins, P.D., & Menguc B. (2006) The implications of socialization and integration in supply chain management. *Journal of Operations Management*, 24(5), 604–620.
- Cronbach, L.J., & Meehl, P.E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52, 281-302. doi: 10.1037/h0040957
- Dattalo, P. (2008). *Determining sample size: Balancing power, precision, and practicality*. Oxford, U.K.: Oxford University Press.
- Delcourt, C. C., Gremler, D. D., Riel, A. C. R., & Birgelen, M. J. H. (2013). Effects of perceived employee emotional competence on customer satisfaction and loyalty: The mediating role of rapport. *Journal of Service Management*, 24(1), 5-24. doi:10.1108/09564231311304161
- Eggert, A., Henseler, J., & Hollmann, S. (2012). Who owns the customer? disentangling customer loyalty in indirect distribution channels. *Journal of Supply Chain Management*, 48(2), 75-92. doi:10.1111/j.1745-493X.2011.03260.x
- Ehlen, C., van der Klink, M., Roentgen, U., Curfs, E., & Boshuizen, H. (2014). Knowledge productivity for sustainable innovation: Social capital as HRD target. *European Journal of Training and Development*, 38(1/2), 54-74. doi:10.1108/EJTD-10-2013-0119

- Fawcett, S. E., & Magnan, G. M. (2002). The rhetoric and reality of supply chain integration. *International Journal of Physical Distribution & Logistics Management*, 32(5), 339-361. doi: 10.1108/09600030210436222
- Fayezi, S., & Zomorodi, M. (2015). The role of relationship integration in supply chain agility and flexibility development: An Australian perspective. *Journal of Manufacturing Technology Management*, 26(8), 1126-1157. doi:10.1108/JMTM-11-2014-0123
- Fickenscher, L. (2017). Sears no bucks after long decline, retail icon may now be. *New York Post (New York, NY)*. Retrieved from <https://www.pressreader.com/usa/new-york-post/20170128/281908772865953>
- Foscht, T., Ernstreiter, K., Maloles, C., Sinha, I., & Swoboda, B. (2013). Retaining or returning?: Some insights for a better understanding of return behaviour. *International Journal of Retail & Distribution Management*, 41(2), 113-134. doi:10.1108/09590551311304310
- Fulgoni, G. M. (2014). "Omni-channel" retail insights and the consumer's path-to-purchase: How digital has transformed the way people make purchasing decisions. *Journal of Advertising Research*, 54(4), 377-380. doi:10.2501/JAR-54-4-377-380
- Ganiyu, R., Uche I., Elizabeth A. (2012). Is Customer Satisfaction an Indicator of Customer Loyalty? *Australian Journal of Business*, 2(7), 14-20. Retrieved from <http://ajbmr.com/articlepdf/aus-27-11i7n2a2.pdf>
- Gimenez, C., Van Der Vaart, T., & Pieter van Donk, D. (2012). Supply chain integration and performance: The moderating effect of supply complexity. *International Journal of Operations and Production Management*, 32(5), 583-610. doi:10.1108/01443571211226506
- Grideanu, N., & Cruceru, G. (2013). Customer loyalty and relationships management. *Metalurgia International*, 18(8), 220-222.
- Guo, H., Zhao, J., & Tang, J. (2013). The role of top managers' human and social capital in business model innovation. *Chinese Management Studies*, 7(3), 447-469. doi:10.1108/CMS-03-2013-0050
- Gupta, A.K. & Govindarajan, V. (2000). Knowledge flows within multinational corporations. *Strategic Management Journal*, 21(4). doi: 10.1002/(SICI)1097-0266(200004)21:4<473::AID-SMJ84>3.0.CO;2-I
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152. doi:10.2753/MTP1069-6679190202
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106-121. doi:10.1108/EBR-10-2013-0128

- Hammervoll, T. (2011). Honeymoons in supply chain relationships: The effects of financial capital, social capital and psychological commitment. *The International Journal of Logistics Management*, 22(2), 264-279. doi:10.1108/09574091111156587
- He, Y., & Lai, K., (2012) Supply chain integration and service oriented transformation: evidence from Chinese equipment manufacturers. *International Journal of Production Economics*, 135(2):791–799. <https://doi.org/10.1016/j.ijpe.2011.10.013>
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence-Based Nursing*, 18(3), 66-67. doi:10.1136/eb-2015-102129
- Heide, J.B., & Miner, A.S. (1992). The shadow of the future: effects of anticipated interaction and frequency of contact on buy-seller cooperation. *Academy of Management Journal*, 35(2), 265-291. doi: 10.2307/256374
- Henseler, J., Ringle, C. M. & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20(1): 277-320. doi: 10.1108/S1474-7979(2009)0000020014
- Hofstede, G., & Bond, M.H. (1988). The Confucius connection: from cultural roots to economic growth. *Organizational Dynamics*, 16(4), 5-21. doi: 10.1016/0090-2616(88)90009-5
- Hooghe, M., & Stolle, D. (2003). Introduction: Generating social capital. In *Generating social capital* (pp. 1-18). Palgrave Macmillan US. https://doi.org/10.1057/9781403979544_1
- Hübner, A., Holzapfel, A., & Kuhn, H. (2016). Distribution systems in omni-channel retailing. *Business Research*, 9(2), 255. doi:10.1007/s40685-016-0034-7
- Hult, G.T.M., Ketchen, D.J. Jr & Slater, S.F. (2004). Information processing, knowledge development, and strategic supply chain performance. *Academy of Management Journal*, 47(2), 241-253. Retrieved from <http://amj.aom.org/content/47/2/241.short>
- Huo, B., Qi, Y., Wang, Z., & Zhao, X. (2014). The impact of supply chain integration on firm performance. *Supply Chain Management*, 19(4), 369. <https://doi.org/10.1108/SCM-03-2013-0096>
- Huscroft, J. R., Hazen, B. T., Hall, D. J., Skipper, J. B., & Hanna, J. B. (2013). Reverse logistics: Past research, current management issues, and future directions. *International Journal of Logistics Management*, 24(3), 304-327. doi: <http://dx.doi.org/10.1108/IJLM-04-2012-0024>
- Inkpen, A.C., & Tsang, E.W.K. (2005). Social capital, networks and knowledge transfer. *Academy of Management Review*, 30(1), 146-165. doi: 10.5465/AMR.2005.15281445
- Isoriate, M. (2016). Customer loyalty theoretical aspects. *Ecoforum*, 5(2). Retrieved from <http://www.ecoforumjournal.ro/index.php/eco/article/view/422>

- Jeong, S. W. (2011). *Impacts of social capital on motivation, institutional environment, and consumer loyalty toward a rural retailer*. (Doctoral dissertation, The Ohio State University). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3493366)
- Jeszka, A. M. (2014). Product returns management in the clothing industry in Poland. *Logforum*, 10(4), 433-443. Retrieved from http://www.logforum.net/pdf/10_4_7_14.pdf
- Jiang, W. (2011). Construct high customer loyalty service supply chain. *Contemporary Logistics*, (5), 63. doi: 10.5503/J.CL.2011.05.012
- Johnson, N., Elliott, D., & Drake, P. (2013). Exploring the role of social capital in facilitating supply chain resilience. *Supply Chain Management: An International Journal*, 18(3), 324-336. doi:10.1108/SCM-06-2012-0203
- Jones, T., & Taylor, S. F. (2012). Service loyalty: Accounting for social capital. *The Journal of Services Marketing*, 26(1), 60-75. doi: 10.1108/08876041211199733
- Kaczorowska-Spychalska, D. (2017). Consumer perspective of omnichannel commerce. *Management*, 21(2), 95-108. doi:10.1515/manment-2017-0007
- Kamal, M. M., & Irani, Z. (2014). Analysing supply chain integration through a systematic literature review: A normative perspective. *Supply Chain Management: An International Journal*, 19(5/6), 523-557. doi:10.1108/SCM-12-2013-0491
- Kibbeling, M., van der Bij, J. D., & van Weele, A. J. (2013). Market orientation and innovativeness in supply chains: Supplier's impact on customer satisfaction. *The Journal of Product Innovation Management*, 30(3), 500-515. doi:10.1111/jpim.12007
- Kim, D. (2013). Relationship between supply chain integration and performance. *Operations Management Research*, 6(1-2), 74. doi:10.1007/s12063-013-0079-0
- Koufteros, X.A., & Cheng, E. (2007). Black-box and gray-box supplier integration in product development: antecedents, consequences and the moderating role of firm size. *Journal of Operations Management*, 25(4), 847-870. Retrieved from <https://doi.org/10.1016/j.jom.2006.10.009>
- Krause, D.R., & Handfield, R.B. (2007). The relationships between supplier development, commitment, social capital accumulation and performance improvement. *Journal of Operations Management*, 25(2), 528-545. doi: 10.1016/j.jom.2006.05.007
- Lam, C. Y., & Ip, W. H. (2011). A customer satisfaction inventory model for supply chain integration. *Expert Systems with Applications*, 38(1), 875-883. doi:10.1016/j.eswa.2010.07.063

- Lawson, B., Tyler, B.B. & Cousins, P.D. (2008). Antecedents and consequences of social capital on buyer performance improvement. *Journal of Operations Management*, 26(3), 446-460. doi: 10.1016/j.jom.2007.10.001
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Rao, S. S. (2006). The impact of supply chain management practices on competitive advantage and organizational performance. *Omega*, 34(2), 107-124. doi: 10.1016/j.omega.2004.08.002
- Liao, J., & Welsch, H. (2005). Roles of social capital in venture creation: Key dimensions and research implications. *Journal of Small Business Management*, 43(4), 345-362. doi:10.1111/j.1540-627X.2005.00141.x
- Liu, Y., Luo, Y., & Liu, T. (2009). Governing buyer-supplier relationships through transactional and relational mechanisms: evidence from China. *Journal of Operations Management*, 27, 294-309. doi: 10.1016/j.jom.2008.09.004
- Lowry, P. B., & Gaskin, J. (2014). Partial least squares (PLS) structural equation modeling (SEM) for building and testing behavioral causal theory: When to choose it and how to use it. *IEEE Transactions on Professional Communication*, 57(2), 123-146. doi: 10.1109/TPC.2014.2312452
- Mayr, S., Erdfelder, E., Buchner, A., & Faul, F. (2007). A short tutorial of GPower. *Tutorials in Quantitative Methods for Psychology*, 3(2), 51-59. Retrieved from https://www.researchgate.net/publication/49619426_A_short_tutorial_of_GPower
- McDonnell, J., Beatson, A., & Huang, C. (2011). Investigating relationships between relationship quality, customer loyalty and cooperation. *Asia Pacific Journal of Marketing and Logistics*, 23(3), 367-385. doi: 10.1108/13555851111143268
- McEvily, B., & Marcus, A. (2005). Embedded ties and the acquisition of competitive capabilities. *Strategic Management Journal*, 26(11), 1033-1055. doi: 10.1002/smj.484
- Merlo, O., Bell, S. J., Mengüç, B., & Whitwell, G. J. (2006). Social capital, customer service orientation and creativity in retail stores. *Journal of Business Research*, 59(12), 1214-1221. doi:10.1016/j.jbusres.2006.09.021
- Min, S., Kim, S. K., & Chen, H. (2008). developing social identity and social capital for supply chain management. *Journal of Business Logistics*, 29(1), 283-304. doi: 10.1002/j.2158-1592.2008.tb00079.x
- Mitra, A., & Lynch, J. (1995). Toward a reconciliation of market power and information theories of advertising effects on price elasticity. *Journal of Consumer Research*, 21(4), 644-660.
- Morgan, N. A., & Rego, L. L. (2006). The value of different customer satisfaction and loyalty metrics in predicting business performance. *Marketing Science*, 25(5), 426-439. doi: 10.1086/209425

- Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational advantage. *Academy of Management Review*, 23(2), 242-266. doi: 10.5465/AMR.1998.533225
- Näslund, D., & Hulthen, H. (2012). Supply chain management integration: A critical analysis. *Benchmarking*, 19(4), 481-501. doi: <http://dx.doi.org/10.1108/14635771211257963>
- Noskova, E. V., & Romanova, I. M. (2015). Evaluation of customer loyalty to different format retailers. *Journal of Internet Banking and Commerce*, 20(S1), 1-16. Retrieved from <http://www.icommercecentral.com/open-access/evaluation-of-customer-loyalty-to-different-format-retailers.php?aid=62413>
- Parmenter, D. (2015). *Key performance indicators: developing, implementing, and using winning KPIs*. Hoboken, New Jersey: Wiley. Retrieved from http://pro-4ot.info/files/books/finance/Key_Performance_Indicators.pdf
- Penske (2014). Top Ten Tips for Managing Reverse Logistics. Retrieved from <http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=7429&context=etd>
- Pérez-Luño, A., Cabello Medina, C., Carmona Lavado, A., & Cuevas Rodríguez, G. (2011). How social capital and knowledge affect innovation. *Journal of Business Research*, 64(12), 1369-1376. doi:10.1016/j.jbusres.2011.01.014
- Perrone, V., Zaheer, A., & McEvily, B. (2003). Free to be trusted? Organizational constraints on trust in boundary spanners. *Organization Science*, 14(4), 422-439. doi: 10.1287/orsc.14.4.422.17487
- Ping, R.A. (1993). The effects of satisfaction and structural constraints on retailer exiting, voice, loyalty, opportunism, and neglect. *Journal of Retailing*, 69(3), 320-352. doi: 10.1016/0022-4359(93)90010-G
- Putnam, R.D. (2000). *Bowling Alone*, Simon & Schuster, New York, NY. Retrieved from <http://www.nytimes.com/books/first/p/putnam-alone.html>
- Rahman, I. A., Memon, A. H., Abdullah, N. H., & Ade Asmi Abdul Azis. (2013). Application of PLS-SEM to assess the influence of construction resources on cost overrun. *Applied Mechanics and Materials*, 284-287, 3649. doi:10.4028/www.scientific.net/AMM.284-287.3649
- Rao, V. R., & Kumar, S. B. (2013). Customer relationship management in retail sector—An empirical study of spencer's retail outlet in Warangal district of Andhra Pradesh. *South Asian Journal of Marketing & Management Research*, 3(1), 129-141. Retrieved from <http://www.indianjournals.com/ijor.aspx?target=ijor:sajmmr&volume=3&issue=1&article=009>

- Reichheld, F. F., Markey, R. G., & Hopton, C. (2000). The loyalty effect-the relationship between loyalty and profits. *European Business Journal*, 12(3), 134. Retrieved from <https://www.highbeam.com/doc/1G1-66705476.html>
- Reinartz, W., Krafft, M., & Hoyer, W. D. (2004). The customer relationship management process: Its measurement and impact on performance. *Journal of marketing research*, 41(3), 293-305. doi: 10.1509/jmkr.41.3.293.35991
- Richter, N. F., Cepeda, G., Roldán, J. L., & Ringle, C. M. (2016). European management research using partial least squares structural equation modeling (PLS-SEM). *European Management Journal*, 34(6), 589-597. doi:10.1016/j.emj.2016.08.001
- Ringle, C. M., Sarstedt, M., & Straub, D. W. (2012). A critical look at the use of PLS-SEM in MIS quarterly. *MIS Quarterly*, 36(1), iii. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2176426
- Rogers, D. S., Lembke, R., & Benardino, J. (2013). *Reverse logistics: A new core competency*. Framington: Peerless Media, Llc. Retrieved from http://www.scmr.com/article/reverse_logistics_a_new_core_competency
- Rouse, M. (2016). *Omnichannel*. Retrieved 21 November, 2016, from <http://searchcio.techtarget.com/definition/omnichannel>
- Russo, I., & Confente, I. (2018). *Customer loyalty and supply chain management: Business-to-business customer loyalty analysis* (First;1; ed.). New York: Routledge. doi:10.4324/9781315162829
- Sankowska, A. (2016). Trust, knowledge creation and mediating effects of knowledge transfer processes. *Journal of Economics & Management*, 23, 33. Retrieved from <http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.cejsh-87878799-516c-4594-ad10-444f2d44e6c2>
- Shah, D., Kumar, V., & Kim, K. H. (2014). Managing Customer Profits: The Power of Habits. *Journal of Marketing Research (JMR)*, 51(6), 726-741. doi:10.1509/jmr.13.0423
- Sharma, N., & Patterson, P.G. (2000). Switching costs, alternative attractiveness, and experience as moderators of relationship commitment in professional, consumer services. *International Journal of Service Industry Management*, 11(5), 470-490. doi: 10.1108/09564230010360182
- Sheng, M., & Hartono, R. (2015). An exploratory study of knowledge creation and sharing in online community: A social capital perspective. *Total Quality Management & Business Excellence*, 26(1-2), 93-107. doi:10.1080/14783363.2013.776769
- Shpëtim Çerri. (2012). Exploring the relationships among service quality, satisfaction, trust and store loyalty among retail customers. *Journal of Competitiveness*, 4(4). Retrieved from <http://www.cjournal.cz/files/114.pdf>

- Singh, J., & Raghuvanshi, R. (2014). Role of supply chain management in retail sector. *International Journal of Management Research and Reviews*, 4(11), 1091. Retrieved from http://ijmrr.com/admin/upload_data/journal_JITENDRA%20SINGH%20%208nov14mrr.pdf
- Smart, J. C. (2016). *Higher education: Handbook of theory and research*, 31. Springer.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, 13, 290-312. doi: 10.2307/270723
- Soper, D.S. (2017). Sobel Test Calculator for the Significance of Mediation [Software]. Available from <http://www.danielsoper.com/statcalc>
- Srivastava, M., & Kaul, D. (2016). Exploring the link between customer experience–loyalty–consumer spend. *Journal of Retailing and Consumer Services*, 31, 277-286. doi:10.1016/j.jretconser.2016.04.009
- Stoker, J. I. (2006). Leading middle management: consequences of organisational changes for tasks and behaviours of middle managers. *Journal of General Management*, 32(1): 31–42. Retrieved from <http://journals.sagepub.com/doi/abs/10.1177/030630700603200103>
- Straub, D.W. (1989). Validating instruments in MIS research. *MIS Quarterly*, 13(2): 147-66. Retrieved from https://www.jstor.org/stable/248922?seq=1#page_scan_tab_contents
- Sujata, J., Sanjay, B., & Swati, J. (2014). A study of customer preferences and experience parameters affecting customer loyalty with respect to Indian DTH industry. *Advances in Management*, 7(7), 21. Retrieved from <https://www.questia.com/library/journal/1P3-3368290351/a-study-of-customer-preferences-and-experience-parameters>
- Sulistyo, H., Mutamimah, & Triwikaningrum. (2015). The role of social capital to improve customer loyalty of Islamic banking in central java. *International Journal of Organizational Innovation (Online)*, 7(4), 138. Retrieved from <http://www.ijoi-online.org/attachments/article/44/FINAL%20ISSUE%20VOL%207%20NUM%204%20APRIL%202015.pdf>
- Sun, K., & Kim, D. (2013). Does customer satisfaction increase firm performance? an application of American customer satisfaction index (ACSI). *International Journal of Hospitality Management*, 35, 68-77. doi:10.1016/j.ijhm.2013.05.008
- Sun, Y., Fang, Y., Lim, K. H., & Straub, D. (2012). User satisfaction with information technology service delivery: A social capital perspective. *Information Systems Research*, 23(4), 1195-1211. doi: 10.1287/isre.1120.0421

- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: the role of intrafirm networks. *Academy of Management Journal*, 41(4), 464-476. doi: 10.2307/257085
- U.S. Census Bureau. (2013). *Data*. Retrieved 8 March, 2017, from <https://www.census.gov/data.html>
- Uzzi, B. (1997). Social structure and competition in interfirm networks: the paradox of embeddedness. *Administrative Science Quarterly*, 42(1), 35-67. doi: http://www.kellogg.northwestern.edu/faculty/uzzi/ftp/social_structure.pdf
- Vickery, S. K., Jayaram, J., Droge, C., & Calantone, R. (2003). The effects of an integrative supply chain strategy on customer service and financial performance: An analysis of direct versus indirect relationships. *Journal of Operations Management*, 21(5), 523-539. doi:10.1016/j.jom.2003.02.002
- Villacé-Molinero, T., Reinares-Lara, P., & Reinares-Lara, E. (2016). Multi-vendor loyalty programs: Influencing customer behavioral loyalty? *Frontiers in Psychology*, 7, 204. doi:10.3389/fpsyg.2016.00204
- Wagner, E. T. (2015). Five Reasons 8 Out Of 10 Businesses Fail. Retrieved June 14, 2017, from <https://www.forbes.com/sites/ericwagner/2013/09/12/five-reasons-8-out-of-10-businesses-fail/#6a7814666978>
- Walsh, M. (2016). *The future of e-commerce: bricks and mortar*. Retrieved 22 November, 2016, from <https://www.theguardian.com/business/2016/jan/30/future-of-e-commerce-bricks-and-mortar>
- Wang, J., & Chiang, M. (2009). Social interaction and continuance intention in online auctions: A social capital perspective. *Decision Support Systems*, 47(4), 466-476. doi:10.1016/j.dss.2009.04.013
- Watson IV, G. F., Beck, J. T., Henderson, C. M., & Palmatier, R. W. (2015). Building, measuring, and profiting from customer loyalty. *Journal of the Academy of Marketing Science*, 43(6), 790-825. doi:10.1007/s11747-015-0439-4
- Wells, J. (2015). *American diversity: Cities where it works*. Retrieved 8 March, 2017, from <http://www.cnbc.com/2015/05/21/american-diversity-cities-where-it-works.html>
- Wolter, J. S., Bock, D., Smith, J. S., & Cronin, J. J. (2017). Creating ultimate customer loyalty through loyalty conviction and customer-company identification. *Journal of Retailing*, 93(4), 458-476. Retrieved from <http://dx.doi.org/10.1016/j.jretai.2017.08.004>
- Woods, C. (2016). *What Is Supply Chain Integration? - Definition and Overview*. Retrieved 4 August, 2016, from <http://study.com/academy/lesson/what-is-supply-chain-integration-definition-lesson-quiz.html#transcriptHeader>

- Woolcock, M., & Narayan, D. (2000). Social capital: Implications for development theory, research, and policy. *The World Bank Research Observer*, 15(2), 225-249. Retrieved from http://158.121.110.113/~pubpol/documents/Woolkock-Week11_001.pdf
- Wunder, T. A. (2015). The commodification of social relationships: What is capital? *Journal of Economic Issues*, 49(2), 511-518. doi:10.1080/00213624.2015.1042797
- Yim, B., & Leem, B. (2013). The effect of the supply chain social capital. *Industrial Management & Data Systems*, 113(3), 324-349. doi: 10/1108/02635571311312640
- Zeithaml, V.A., Berry, L.L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46. doi: <http://dx.doi.org/10.2307/1251929>
- Zhang, C., Gunasekaran, A., & Wang, W. Y. C. (2015). A comprehensive model for supply chain integration. *Benchmarking: An International Journal*, 22(6), 1141-1157. doi: 10.1108/BIJ-05-2013-0060
- Zhang, M., & Huo, B. (2013). The impact of dependence and trust on supply chain integration. *International Journal of Physical Distribution & Logistics Management*, 43(7), 544-563. doi: 10.1108/IJPDLM-10-2011-0171
- Zhang, Y., & Li, H. (2010). Innovation search of new ventures in a technology cluster: The role of ties with service intermediaries. *Strategic Management Journal*, 31(1), 88-109. doi: 10.1002/smj.806

STATEMENT OF ORIGINAL WORK

Academic Honesty Policy

Capella University's Academic Honesty Policy (3.01.01) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also stated in the Policy is the expectation that learners will follow APA rules for citing another person's ideas or works.

The following standards for original work and definition of *plagiarism* are discussed in the Policy:

Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person's ideas, including another learner's, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University's Research Misconduct Policy (3.03.06) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

I have read, understood, and abided by Capella University's Academic Honesty Policy (3.01.01) and Research Misconduct Policy (3.03.06), including Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

Learner name
and date



11/16/17

APPENDIX A.
INFORMED CONSENT FORM

Study Title: THE RELATIONSHIP OF SOCIAL CAPITAL, SCI IMPLEMENTATION AND CUSTOMER LOYALTY, AND THEIR EFFECT ON FIRM PERFORMANCE

Researcher: Rickey Mask, M.A.

Email Address and Telephone Number: rmask@capellauniversity.edu, (731) 332-0207

Research Supervisor: Dr. Andrew Borchers

Email Address: andrew.borchers@capella.edu

You are invited to be part of a research study. The researcher is a doctoral learner at Capella University in the School of Business. The information in this form is provided to help you decide if you want to participate. The form describes what you will do during the study and the risks and benefits of the study.

WHAT IS THIS STUDY ABOUT? The researcher wants to find out what people think about the existence of social capital within their experiences in retail firms and retail firm supply chains.

WHY AM I BEING ASKED TO BE IN THE STUDY? You are invited to be in the study because you are:

- **A retail consumer within the Northeastern portion of the United States or**
- **A retail supply chain professional within the Northeastern portion of the United States and**
- **Are 18+ years of age.**

If you do not meet the description above, you are not able to be in the study. About 200 participants will be in this study.

CONFLICT OF INTEREST DISCLOSURE The researcher is employed by Lowe's Home Improvement but is not receiving funds to conduct this study. The researcher will not be paid for conducting the study.

WHAT WILL HAPPEN DURING THIS STUDY? If you decide to be in this study, you will do the following things:

- give personal information about yourself, such as retail locations you shop at or how you interact with members of your retail supply chain.
- complete a survey about how these experiences influence your willingness to shop at a retail location or how these relationships impact your supply chain efficiency.

The survey should take about 15-20 minutes to complete.

WILL BEING IN THIS STUDY HELP ME? Being in this study will not help you. Information from this study might help researchers help others in the future.

ARE THERE RISKS TO ME IF I AM IN THIS STUDY? No study is completely risk-free. However, we do not anticipate that you will be harmed or distressed during this study. You may stop being in the study at any time if you become uncomfortable. You should be aware, however, that there is a small possibility that responses could be viewed by unauthorized parties (e.g. computer hackers because your responses are being entered and stored on a web server)

WILL I GET PAID? You will not receive any compensation from the researcher for being in the study.

WHO WILL USE AND SHARE INFORMATION ABOUT MY BEING IN THIS STUDY? Any information you provide in this study that could identify you such as your name, age, or other personal information will be kept confidential. Responses will be numerically coded and personal information will not be utilized in the explanation of results. In any written reports or publications, no one will be able to identify you.

The researcher will keep the information you provide in a password protected computer in the researcher's residence and only the researcher, researcher's supervisor, and dissertation committee will have access to the study data. Additionally, Capella University's IRB, the Research Compliance Committee (RCC), or its designees may review your research records.

WHO CAN I TALK TO ABOUT THIS STUDY? You can ask questions about the study at any time. You can call the researcher at any time if you have any concerns or complaints. You should contact the researcher if you have questions about the study procedures, study costs (if any), study payment (if any), or if you get hurt or sick during the study.

Capella University's Institutional Review Board (IRB) has been established to protect the rights and welfare of human research participants. Contact us at 1-888-227-3552, extension 4716, or irb@capella.edu if you have questions or concerns about this research study.

You may contact the IRB without giving us your name. We may need to reveal information you provide in order to follow up if you report a problem or concern.

DO YOU WANT TO BE IN THIS STUDY? By selecting 'I agree' below you agree to the following statement:

I have read this form, and I have been able to ask questions about this study. I voluntarily agree to be in this study. I agree to allow the use and sharing of my study-related records as described above.

I have not given up any of my legal rights as a research participant. I will print a copy of this consent information for my records.

CLICK 'I AGREE' TO CONTINUE TO THE SUVEY OR 'I DISAGREE' TO EXIT