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Does Student Engagement Affect Learning? An Empirical Investigation of Student Involvement Theory

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ABSTRACT

Student involvement theory claims that students that are more involved/engaged will have increased learning over those students that are less engaged. Although this claim has been accepted at face value, there is recent criticism based on empirical results that do not always provide strong links between student engagement and learning outcomes. To investigate this inconsistency, we collected engagement data from 77 undergraduate students across three sections of a Business Communication course and one section of Current Issues in Business. Our results show that two moderators may be affecting the link between engagement and learning: engagement scale dimensions and the learning activity used to increase engagement. We used these results to provide recommendations for future studies and to discuss the practical implications for academic and business education.

Introduction

There is growing pressure for colleges and universities to produce students capable of managing a complex work environment. One argument has been that universities should change their policies and practices to increase student engagement. The basis of this statement is that engagement leads to better student performance at college (Kuh, 2003) and hopefully, beyond. The National Survey of Student Engagement (NSSE) is the most commonly used survey for student involvement. However, this instrument was developed as a comparison of student engagement across universities and therefore measures the overall level of student engagement at the college level, not at the course level as needed to guide educator practices inside the classroom (Burch, Heller, & Freed, 2014).

Supporting this drive for increasing student engagement, the Association to Advance Collegiate Schools of Business Standard 13 (AACSB, 2013) states that students engage academically and

professionally when they are “actively involved in their educational experiences, in both academic and professional settings, and when they are able to connect these experiences in meaningful ways.” These guidelines contain five judgment criteria centered on student involvement with learning materials, regardless of the difficulty in learning activities, and active engagement in learning the curricula of their desired degree program. Other considerations are that students are given the opportunity to be involved with faculty and business leaders of the community through coursework or extracurricular activities and to gain exposure to business and management through learning activities. At the heart of these new standards is the requirement for universities to create environments where the student will be engaged to a level that will allow them to make connections with their own experiences, both academically and professionally, thereby reaching learning goals of the program and the student.

The purpose of this study is to investigate the link between student involvement (engagement) and learning. To accomplish this task we will use a new, psychometrically proven student involvement survey (Burch, Heller, & Freed, 2014) that measures student cognitive, affective, and physical engagement at the class/course level. We will use this survey to link several forms of student engagement to actual learning outcomes across four business classes.

A review of student involvement theory will be discussed in the following section. The methodology section will discuss the measures and results of the relationship survey between student involvement (engagement) and learning outcomes. The final section of this study offers recommendations and implications for educators to consider regarding student involvement in relation to increased learning.

Student Involvement Theory

Student involvement theory claims that students that are more involved and/or engaged will have increased learning over those students that are less engaged. Educational theorist Astin (1999) characterizes student involvement as a theory that “refers to the quantity and quality of the physical and psychological energy that students invest in the college experience” (p. 518). The greater the student’s involvement, the greater will be the amount of student learning and personal development.

Student involvement literature revealed two important measures that must be used to determine student involvement (engagement): (1) the relationship that learning activities, whether active or passive, play on student engagement and, (2) the subsequent learning outcomes associated with those activities (Burch, Heller, & Freed, 2014).

Astin (1999) theorizes that student involvement results in increased learning due to policies and practices. Student involvement is linked to student learning as a result of (a) investment of physical and psychological energy, (b) involvement transpires along a continuum, (c) involvement contains quantitative and qualitative features, (d) student learning is related to the quality and quantity of student involvement, and (e) student involvement increases when the policy or practice of policy is related to the capacity of that policy or practice. Lund Dean and Jolly (2012) state that student “engagement is a concept designed to measure the equality of

learning experiences as a whole” (p. 230). Kuh (2003) uses the term student engagement and maintains that students direct their energy toward involvement and learning activities. Burke and Moore, (2003) state it is “difficult to engage young students when they have yet to recognize the need for it” (p. 38). Research indicates that students who spend more time engaged in their academic studies, learning outcomes will be higher than those who are less engaged (Friedlander & MacDougall, 1992).

Astin’s (1975) longitudinal study revealed students who remained in college were involved by living on campus, being a member of a social fraternity or sorority, participating in extracurricular activities, and holding a part-time job on campus to name a few. Students who were involved and engaged with their institution were able to identify with the institution they were attending. Further, it was easier for students to become involved when they identified with the college environment.

Astin (1999) defines involvement as having behavioral component. “It is not so much what the individual thinks or feels, but what the individual does, how he or she behaves, that defines and identifies involvement” (p. 519). The theory of student involvement encourages educators to focus more on what the student does and less on what they do in and out of the classroom. Involvement theory focuses on the motivation and behavior of the student and not the subject matter of the class/course and the technique provided by the educator.

Student Involvement Survey

The previous literature review section shows that until recently the focus of student engagement has been at the university or college level. This discussion is most relevant to university policy-makers, but does not effectively address where student involvement may be most important. Students must be engaged in their courses. University policies may help with overall student engagement outside of class, but educators are responsible for engaging the student at the course/class level. It is therefore important to evaluate student engagement at the individual course/class level to provide educators insight into the activities, policies, practices, assignments, teaching style, and other course management items that can drive student engagement.

Kahn’s (1990) theory of work engagement stated that employees must be willing to invest physical, cognitive, and emotional resources in the performance of their roles (Burch, Heller, & Freed, 2014). Based on this idea, we selected a new student engagement survey that explores student involvement in four areas: physical engagement, emotional engagement, cognitive engagement in class, and cognitive engagement out of class.

Physical engagement (Astin, 1999) is built around the physical effort that is exerted on the task. To address this aspect students responded to questions like: “I exert my full effort towards this class/course.” and “I devote a lot of energy towards this class/course.”

Emotional engagement (Lund Dean and Jolly, 2012) consists of the affective part of engagement. Anyone who has taught has noticed the difference between a classroom that is emotionally attached to the subject, the educator, or to some other aspect of the course. Many of us chose our

degree paths in our undergraduate work based on an affective reaction that we had with a subject. To investigate student emotional engagement they responded to question like: “I feel energetic when I am in this class/course.” and “I feel positive about the assignments I complete in this class/course.”

Kahn (1990) stated that cognitive engagement was the third dimension for work engagement. We believe that cognitive engagement is especially important for students since learning is a cognitively driven component. However, we believe that students learn both in class and out of class so it is important assess cognitive engagement in class and out of class. Cognitive engagement in class is the time and energy students devote to educationally sound activities inside the classroom. To measure this, students responded to questions like: “When I am in the classroom for this class/course, my mind is focused on class discussion and activities.” and “When I am in the classroom for this class/course, I concentrate on class discussion and activities.”

Cognitive engagement out of class is the time and energy students devote to educationally sound activities outside the classroom (Kuh, 2003). Cognitive engagement out of class was measured using questions like: “When I am reading or studying material related to this class/course, I pay a lot of attention to class discussion and activities” and “When I am reading or studying material related to this class/course, my mind is focused on class discussion and activities.”

Method

The sample consisted of 77 undergraduate business students at a regional university in the southern United States. The sections chosen for this study were selected as a convenience sampled based on the courses currently being taught by the first author. The sections chosen were three sections of Business Communication and one section of Current Issues in Business. Students were asked to participate in the study and were given extra credit for their participation. Female participants consisted of 34.7% and 22.2% were minority. The average age was 26.4 years. Two of the sections used for this study consisted of non-traditional students which resulted in a higher average age.

Each of the four student engagement subscales was analyzed to separate students into approximately equal subsets. The highest third ranking students, as determined by their responses on engagement subscale, were placed in the top third, similarly the middle and lower groups were established. This resulted in approximately 25 students in each of the three groups. The average learning (test score) was calculated for each of the three groups and Analysis of Variance was used using SPSS Version 21 to determine if there was a significant difference between means of the groups.

Measures

The primary relationship being tested in this study was the relationship between engagement and learning outcomes. Engagement was separated into four different dimensions (physical

engagement, emotional engagement, cognitive engagement in class, and cognitive engagement out of class). A previously used and validated engagement survey was used to collect data during the class period before the exam. Control variables (birth year, gender, race/ethnicity) were collected in conjunction with the engagement survey. The dependent variable, learning, was measured using a multiple-choice and true/false test that assessed the student’s ability to meet the course learning objectives.

Engagement – Participants were asked to respond to a 12 item student engagement survey developed and validated by Burch et al. (2014). Questions were five level Likert scale questions using anchor words “Disagree” to “Agree.” There are three questions for each of the four engagement dimensions (physical, emotional, cognitive – in class, and cognitive – out of class). Previous Cronbach Alpha reliabilities for each of the subscales have ranged from .71 to .90.

Learning – A multiple-choice, true/false test was used to determine student mastery of learning objectives that had been covered either in class, through reading, or during on-line discussions. The test contained fifty questions and has been used in previous sections of this course.

Results

Descriptive statistics and Pearson Product Moment Correlations were generated for all four student engagement dimensions along with learning and student age. One-Way Analysis of Variance was then used to determine if there was a significant difference in means across independent variable subgroups. Descriptive statistics and correlations are presented in Table 1.

TABLE 1

Pearson Product Moment Correlations

Variable	Mean	SD	Physical	Emotional	Cognitive In class	Cognitive out of class	Learning
Physical	4.18	.803					
Emotional	3.98	.701	.41**				
Cognitive In class	3.99	.919	.37**	.49**			
Cognitive Out of class	3.88	.914	.59**	.44**	.38**		
Learning	83.8	8.47	.18	-.06	.01	.15	
Birth year	1987.9	8.20	-.34**	-.31**	-.16	-.39**	-.25**

* *p* significant at .10 or less

* *p* significant at .05 or less

The correlation between student engagement subscales and student learning were not significant. However, physical engagement, emotional engagement, and cognitive engagement out of class were significantly related to student birth year.

TABLE 2

One-Way Analysis of Variance of Means by Physical Engagement

Variable	Physical Engagement	N	Mean	SD	95% CI Lower	95% CI Upper	F	Sig.
Learning	Lowest	24	80.1	7.11	77.1	83.1	3.62	.03**
	Middle	25	85.4	7.82	82.2	88.7		
	Highest	26	85.6	9.36	81.8	89.4		
Birth Year	Lowest	24	1991	4.52	1989	1992	9.32	.00**
	Middle	25	1990	4.02	1989	1987		
	Highest	24	1983	11.3	1978	1990		

* *p* significant at .10 or less

** *p* significant at .05 or less

The comparison of means shows that there is a statistically significant difference between the grades that students make when comparing their level of physical engagement in the class. Students that are more physically engaged score higher on tests of course learning objectives. Similarly, older students appear to be more physically engaged than younger students.

TABLE 3

One-Way Analysis of Variance of Means by Emotional Engagement

Variable	Emotional Engagement	N	Mean	SD	95% CI Lower	95% CI Upper	F	Sig.
Learning	Lowest	25	82.9	7.40	79.8	85.9	.936	.40
	Middle	25	85.7	8.24	82.3	89.1		
	Highest	25	82.8	9.64	78.8	86.8		
Age	Lowest	25	1991	3.44	1990	1992	4.07	.02**
	Middle	25	1988	7.84	1984	1991		
	Highest	23	1985	10.8	1980	1989		

* *p* significant at .10 or less

** *p* significant at .05 or less

The comparison of means shows that there is not a statistically significant difference between the grades that students make when comparing them to the level of student emotional engagement. However, older students are more emotionally engaged than younger students.

TABLE 4**One-Way Analysis of Variance of Means by Cognitive Engagement In Class**

Variable	Cognitive in class	N	Mean	SD	95% CI Lower	95% CI Upper	F	Sig.
Learning	Lowest	25	84.0	8.10	80.7	87.3	.07	.94
	Middle	25	83.3	8.34	79.8	86.7		
	Highest	25	84.1	9.25	80.3	87.9		
Age	Lowest	25	1990	6.14	1987	1992	1.69	.19
	Middle	25	1988	8.60	1985	1992		
	Highest	23	1985	9.37	1981	1989		

* *p* significant at .10 or less

** *p* significant at .05 or less

There is no statistically significant difference between student grades and reported cognitive engagement in class. There is also no significant relationship between cognitive engagement in class based on students age.

TABLE 5**One-Way Analysis of Variance of Means by Cognitive Engagement Out of Class**

Variable	Years of Service	N	Mean	SD	95% CI Lower	95% CI Upper	F	Sig.
Learning	Lowest	25	82.8	8.16	79.4	86.2	.25	.78
	Middle	25	84.2	7.99	80.9	87.5		
	Highest	25	84.3	9.45	80.4	88.2		
Age	Lowest	25	1991	4.46	1989	1993	6.87	.00**
	Middle	25	1989	7.25	1986	1993		
	Highest	23	1983	10.2	1979	1988		

* *p* significant at .10 or less

** *p* significant at .05 or less

Comparing the means of learning across the three levels of cognitive engagement reveals no significant change in student learning. However, older students once again demonstrated that they had a statistically different level of cognitive engagement out of class. Older students appear to engage themselves more significantly outside of the classroom.

Discussion & Consideration

In Colleges of Business, the role of engagement in learning is being increasingly scrutinized as part of the new AACSB Standards, specifically Standard 13 (AACSB, 2013) which states that “students give the appropriate attention and dedication to the learning materials and maintain their engagement with these materials even when challenged by difficult learning activities.” As

outlined, the primary relationship being tested in this study was the relationship between engagement and learning outcomes.

Kahn (1990) claimed that the investment of resources results in physical, cognitive, and emotional dimensions of engagement that produce active, full performance as demonstrated by student attendance, student performance, and student products. We tested four different dimensions of engagement (physical, emotional, cognitive in class, and cognitive out of class). Our results indicate that older students are more engaged in three of the four dimensions of engagement, as well as being equally engaged as younger students on the fourth dimension. Building on Kahn's work, engagement leads to learning. More specifically the more engaged a student, the deeper the learning.

Results indicate that students who are physically engaged in class perform better than students who are less engaged physically. Additionally, we found that students who are older were more physically engaged than younger students. Further, older students also demonstrated that they had a statistically different level of cognitive engagement out of class. Older students appear to engage themselves more significantly outside of the classroom. As with other dimensions, older students are more emotionally engaged than younger students. The difference in levels of engagement between younger and older students can be explained by one factor – experience. This ‘real world’ experience which leads to more engagement with almost all dimensions. We propose that students with more experience in a work environment, as non-traditional students generally possess, are better able to engage because of the experience they relate to what they are learning.

With physical engagement, older students understand from their own experience that problems are not solved and skills are not mastered on the first attempt. Instead, older students understand the value of giving their full effort to a class related task. The experiences of life teach individuals persistence and older students typically have more experience which leads to higher levels of physical engagement.

Emotional engagement is measured by a student's interest in the subject matter, the instructor, or to some other aspect of the course. Undergraduate students often select their major based on an affective reaction with the subject such as a positive experience with an introductory course. However, older students with more experience have had more interactions with the subject matter and thus have more data points on which to contemplate to select the subject matter. This leads to a stronger selection based on more data points and thus a better fit for the student as well as the course subject matter which is part of a major the student has selected. Again, more experience leads students to a more emotional engagement with the subject matter.

Cognitive engagement out of class is the time and energy students devote to educationally sound activities outside the classroom (Kuh, 2003). As with the other dimensions, older students showed higher levels of engagement because of their experience. In the case of out of class engagement, older students have a wealth of experience on which to reflect and apply course material. As non-traditional students reflect on what they have learned in class while outside of class they apply what they have learned to their ‘real life’ experience.

We have presented a theory of student engagement that is based on experience. While this is simple and logical, it places a greater burden on the educator when dealing with younger students who do not have the experience of older students. In order to fully engage younger students, on all dimensions, is to facilitate the process by which experience is gained for those students who do not have real experience. This experience is gained by means of experiential learning exercises for all students. The original definition of experiential learning (Hoover, 1974) stated that experiential learning was learning that occurred through personal involvement where the whole person, in both his feeling and cognitive aspects, were included in the learning event. Experiential Learning Theory defines experiential learning as “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (Kolb, 1984, p. 41).

Experiential learning is built around the idea that experience leads to knowledge. Experiential learning activities range from simulations to internships, each with the goal of providing students with the opportunity to gain experience which will lead to greater engagement. The principal advantage of experiential learning experiences is that by reflecting on their experiences, developing personal insights and understandings through involvement in intellectual, emotional and physical activity younger students can increase their engagement which will lead to deeper learning.

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Chasing the Pink Dollar: A Study of Hospitality Related Business that Market to the LGBT Consumer; Who's Walking the Walk?

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ABSTRACT

With a shift in public opinion and the recent legal advancements that provide equal rights for same-sex couples, it has become common-place to see LGBT (Lesbian, Gay, Bisexual, Transgender) themed advertisements throughout mainstream media. Previous research has examined the LGBT consumer, their spending habits and propensity toward brand loyalty; however, few have examined the policies and practices of companies that represent themselves as gay-friendly through advertising. This study investigates companies that specifically target the LGBT consumer and highlights those companies that have policies and practices that provide equal treatment toward LGBT employees and support the socio-political efforts of the LGBT community. The results will assist current and future marketers by highlighting issues and measurers that influence the spending choices of the LGBT consumers. Utilizing the results of the Human Rights Campaign (HRC) Consumers Buyer Guide, the study was able to highlight hospitality related businesses that target the LGBT market while creating recourses and implementing policies and corporate practices that support the gay agenda. Included in the study is an examination of the policies and practices of Pernod Richard, the parent company of Absolut Vodka, the first "mainstream" company to target the LGBT community and one of the most visible brands in terms of advertising and sponsorship. It is important to note that the findings of this study are based on the scores from the HRC Corporate Equality Index which, in some instances, are estimates based on information about the company with or without their assistance and/or participation.

Keywords: LGBT Marketing, LGBT Consumers, LGBT Travel, Gay-friendly Businesses.

Introduction

In 1981 Absolut Vodka placed two "market specific" advertisements; one in The Advocate and the other in After Dark Magazines both publications catering predominantly to homosexual men. (Elliott, 2011). This event marked the first time that a mainstream company had target marketed any such group. At the time this strategy was seen as both risky and groundbreaking. Critics of this marketing strategy contended that such practices would alienate consumers who viewed homosexuality as morally wrong. Members of the LGBT community, however, found this marketing strategy refreshing and were quick to support companies, such as Absolut, who were deemed "gay friendly". (Elliott, 2011). In the years to follow, with a shift of social views

towards homosexuality, several companies have followed suit, capitalizing on the brand loyalty nature and higher than average disposable income of LGBT households. (Witeck Marketing, 2013). Today, it has become common place to see both print and television ads featuring gay and lesbian couples which target the LGBT community. This research will examine the LGBT consumer, their spending habits and their propensity toward brand loyalty. It will also examine companies that target this demographic and how these companies' policies and practices rate in terms of how they treat their LGBT employees and the LGBT community. Numerous studies have examined the political and socio-economic rise of the LGBT community. (Chasin, 2000). Studies have also shown that the LGBT community has a propensity toward travel and leisure activities and entertainment; including the consumption of alcoholic beverages. (Witeck Marketing, 2013). In an effort to take advantage of the spending dollars of this emerging consumer group, several companies have aggressively targeted marketed Gays and Lesbians. This study will examine companies who sell product and services that fall into this category and that specifically create advertisements which include portrayals of members of the LGBT community or iconic LGBT symbols or references. In addition the study will identifying and examines those companies' whose policies and practices are fair and just to their LGBT employees and the gay community-at-large.

Background

According to a 2011 Williams Institute report 3.8% of all Americans identified as Gay, Lesbian, Transgender or Transsexual. (Gates, 2011). It was estimated that in 2013 the LGBT community would spend \$843 billion dollars. (Witeck Marketing, 2013). On average members of the LGBT community have achieve a higher level of education (The Williams Institute, 2011), earn more and purchase products and services from companies that support LGBT rights. (Witeck Marketing, 2013). A 2013 Pew Research Center survey reports that 51% of LGBT adults have not brought products or services from companies that do not support LGBT rights, while 49% have specifically bought products and services from LGBT friendly companies. (Pew research Center, 2013). It is estimated that in the United States LGBT consumer spends \$70 million dollars a year. (Rosenbloom, 2014). In addition the LGBT consumer is characterized as traveling more often, spending more on travel and less likely to cancel vacation plans. (Rosenbloom, 2014). On average Gay men drink more spirit based cocktails then their non-gay counterparts while lesbians drink more beer than their non-lesbian counterparts. (Community Marketing, Inc., 2012).

The combination of these factors has made members of the LGBT community attractive to several companies, especially hospitality enterprises including those that sell alcoholic beverages, as well as travel and leisure service.

Methods and Procedures

For the purpose of this study several business where chosen to be examined based on their marketing strategy and advertising campaigns targeted toward the LGBT community. The companies that were examined have all been recognized by the Gay and Lesbian Alliance

Against Defamation (GLAAD) for their support and portrayal of the LGBT community through advertisements. (GLAAD, 2014). As a measure of the company's policies and practices, this study utilized information from the Human Right Champagne (HRC) Buyer's Guide. (HRC Buyer's Guide, 2014). The Human Rights Campaign is a civil rights organization whose mission is to promote equality for the LGBT community and all individuals. The information in the HRC Buyer's Guide is based on a survey of numerous companies which rates each business on a 100 point scale based on the following nine categories:

- Non-discrimination policy includes sexual orientation
- Non-discrimination policy includes gender identity and/or expression
- Company-provided domestic partner health insurance (including parity in spousal and partner COBRA, dental, vision and domestic partners legal dependent coverage)
- Parity in spousal/partner soft benefits (bereavement leave; supplemental life insurance; relocation assistance; adoption assistance; joint/survivor annuity; pre-retirement survivor annuity; retiree healthcare benefits; employee discounts)
- Offers equal health coverage for transgender individuals without exclusion for medically necessary care
- Organizational LGBT cultural competency (diversity trainings, resources or accountability measures)
- Company-supported LGBT employee resource group or firm-wide diversity council that includes LGBT issues, OR would support a LGBT employee resource group with company resources if employees expressed an interest
- Engages in appropriate and respectful advertising and marketing or sponsors LGBT community events, organizations, or legislative efforts
- Does not engage in actions that would undermine the goal of LGBT equality

The information in this guide comes from the 2013 Corporate Equality Index, the Human Rights Campaign's annual report card on corporate America's treatment of lesbian, gay, bisexual and transgender employees. Each company is rated on a scale from 0 to 100 which is an assessment of their policies that support LGBT employees. For those businesses that choose not to participate in the survey, HRC provides an estimated that reflects the information that the HRC was able to obtain.

Findings

The following four companies market to the LGBT community through print advertisement, television commercials, company website or a combination of the three. (GLAAD, 2014). Each company received a perfect rating of 100 points in the HRC Buyer's Guide recognizing their commitment to fair and equal practices for LGBT employees and supporting LGBT rights. (HRC Buyer's Guide, 2014).

MillerCoors

MillerCoors manufactures and distributes Miller Beer and Coors Beer. Their print ads predominantly appear in regional LGBT publications, they also sponsor gay pride events across

the United State. (Weinstein, 2013). In the 70's, before their merger with The Miller Brewing company, the LGBT community boycotted Coors Beer and accused them of firing employees for being gay in addition to endorsing political candidates who supported anti-gay policies. Over the next couple of decades, much has changed, in the 90's Coors formed LGBT and Allies Group Employees Resources (LAGER) an employee's advocacy group. (Weinstein, 2013). Today, MillerCoors company policy states that, "Ethics and responsibility play an integral part in everything we do, from marketing and selling our beers to our supply chain operations". The code applies to everyone working for or on behalf of the company. (MillerCoors , 2014).

Orbitz

Orbitz is the nation's third largest third-party travel booking site. They run both print ads and television commercials in LGBT publications and media outlets including LOGO television a LGBT cable network. (GLAAD, 2014). The winner of two GLAAD media awards, Orbitz has well-defined non-discrimination policies in the workplace and supports the LGBT community. For seven consecutive years Orbitz has received a perfect score on the Corporate Equality Index. (Orbitz, 2014). The company has expanded their visibility and brand within the LGBT community by becoming a sponsor of Ru Paul's Drag Race, LOGO Television's highest rated show. (Lowder, 2014).

American Airlines

American Airline, the world's third largest airlines runs print advertisements in LGBT publication. In 2000 the company created a special team to advertise to the LGBT community. They also have a specific section on their public website called LGBT AIR, which caters to the LGBT traveler. (American Airlines , 2014). In addition the company has a section on their public website, The Rainbow Page, which caters to the LGBT travelers by offering discounts and deals to popular destinations and LGBT events. (American Airlines , 2014).

Hyatt Hotels

As the world's third largest hotel group, Hyatt Hotel advertises in mainstream and LGBT travel magazines. Named as one of the "Best Places to Work for LGBT Equality"

Hyatt has also established HyPride a Hyatt's Employee Network Group for members and supporters of the LGBT community. (Hyatt, 2014). HyPride's objectives include; ensuring a LGBT non-discriminatory workplace, LGBT outreach and services and sponsoring educational and cultural programs on LGBT issues. (Hyatt, 2014).

Discussion and Conclusions

Within the past few years, several events have occurred that have been considered to be social and political milestones for the LGBT community. Most notably was the Supreme Court decision to overturn The Defense of Marriage Act (DOMA), which in turn allowed States to determine whether or not to recognize same-sex marriage. (Liptak, 2013). These events have

raised visibility of the LGBT consumer and the rise of their socioeconomic and political strength. To keep up with this trend, many companies have elevated their marketing efforts to target this consumer group. At the same time many companies have developed and implemented policies ensure equal treatment for LGBT employees. Some companies have gone as far as to create panels and employee groups to ensure that their LGBT employees are treated with respect and equality. In addition to the four business listed above, this study examined the HRC rating for one other company, Pernod Ricard, the parent company of Absolut Vodka. As mentioned earlier, Absolut Vodka was the first, "mainstream" company to target market the LGBT community, more specifically gay men. (Elliott, 2011). In the thirty years since, Absolut has become a recognized brand within the LGBT community. (Elliott, 2011). Their visibility has increased by supporting and sponsoring numerous LGBT pride events across the United States and Europe. In Addition the company has elevated its brand as a LGBT-friendly business by sponsoring Ru Paul's Drag Race, the number one rated show on LOGO, a LGBT cable network. (Elliott, 2011). Despite their high profile brand recognition and marketing attempts to establish themselves as a gay-friendly brand Absolut's parent company Pernod Ricard has a HRC rating of 75 out of 100. (HRC Buyer's Guide, 2014).

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An Investigation of Perceived Brand Age, Cognitive Age and Brand Selection

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ABSTRACT

It has been implied that age perceptions affect consumer choice. One supposition is that older consumers patronize “older” brands. Similarly, one might assume that individuals inherently seek out brands that aligned with their own age perceptions. Understanding these relationships more fully could have significant implications for marketing, branding, advertising practitioners and researchers. This study seeks to understand the relationship between perceived brand age and the perceived age of the person who uses that brand. In addition, it explores the supposition that those who feel older will select brands that align with their cognitive age. Via a 2 x 2 x 2 experimental research design, the relationships between these variables are quantified in a nationwide study of 1,000 subjects. The results from this research show little association between perceived brand age and the perceived age of its users. In addition, the results indicate that a consumer who feels older is not necessarily predisposed to select a brand or product that he/she perceives as older.

Keywords: Marketing; Consumer Behavior; Perceived Brand Age; Cognitive Age; Brand Selection.

Introduction

The goal of this research endeavor was to obtain a clearer understanding of the perceived age of a brand and its users, as well as how cognitive age may influence brand selection, the latter as measured by purchase intentions. The research sought to determine if a statistically significant relationship existed between each set of variables. The research investigated two premises: (1) consumers align their age perceptions of a brand its users, and (2) “older” consumers seek out “older” products whilst “younger” consumers seek out more youthful ones.

Conceptual Background

Brand Age

A brand is not only a name. It is the organization behind it, the relationships it establishes, and the symbolism it represents (Aaker, 1996). Brand associations form the promise of the bundles of attributes that someone buys and that provide satisfaction. The attributes that make up a brand may be real or illusory, rational or emotional, tangible or invisible (Ambler and Styles, 1997).

A brand can be described by a set of human characteristics, known as brand personality (Aaker, 1997). These personality facets contain various elements that refer to age perceptions, such as young, trendy, up-to-date, and contemporary.

There is a difference between a brand's perceived age and its actual age (Lehu, 2004). A brand can be very aged but still young in the minds of consumers. Perceptions of youth and age are common associations, or attributions, made by the consumer with the brand (Aaker and Keller, 1990).

Some believe that chronological age, a basic brand-aging indicator, can scare off some consumers. Therefore, marketers must continuously develop efforts to add value, protect, strengthen, and rejuvenate old brands (Lehu, 2006). However, it is possible that there are consumers who perceive "old" as a positive brand attribute, rather than a negative one. Hence, some marketers of young brands have deliberately placed them in futuristic settings such as science fiction movies with the intent of depicting them as stronger, longer established, and more enduring brands than they actually are (Afiff *et al.*, 2014).

In fact, several scholars have recognized the intrinsic value of the brand age. Magnusson *et al.* (2011), in a study about country-of-origin effect, controlled for brand age and size, based on the assumption that consumers have more positive attitudes toward older brands. An investigation in the context of the Indian pharmaceutical industry found a positive relationship between brand age and brand awareness and brand recall (Sanya *et al.*, 2013). Also, brand age was found to have a significant correlation with the variable "enhancing market power" in a study of attitudes and perceptions of pharmaceutical value chain members towards consumer promotions (Srivastava and Sharma, 2010). On the other hand, Blombäck and Scandeliuss (2013) failed to confirm a significant impact of brand age on responsible brand image in their investigation about the role of corporate heritage in corporate social responsibility (CSR) communication.

In terms of measuring the perceived age of brands, several authors (e.g., Rosenberg, 1979; Sirgy, 1982; Deaux and Lewis, 1983, 1984; Aaker, 1997; Lehu, 2004) have attempted to understand and measure brand age. Lehu (2004) categorized the reasons for brand-aging problems in three classes: the offer, the target, and the brand communications. Darpy and Levesque (2005) noted that, despite the ongoing debate about the effect of aging on brands, there was no uniform way to measure perceptions of brand age. Therefore, they undertook the challenge of measuring perceived brand age as a multidimensional construct and treated it as a completely separate construct.

They quantified two measurement factors of brand age: (1) physical appearance, as measured by three scales (disgraceful to graceful, ugly to beautiful, and unaesthetic to aesthetic); and (2) role in the market, as measured by three scales (insignificant to visible, traditional to innovative, and in withdrawal to present).

A primary conclusion from this research was that “young–old” as a sole descriptor is too broad to properly measure perceived age. The authors noted that perceived brand age is defined as a socio-demographic characteristic of the brand, appreciated in a subjective way by the consumer starting from the physical aspect of this brand and the specific role which it holds on the market.

Cognitive Age

Self-perceived age or “how old you feel” is defined in the psychological literature as cognitive age and is an integral part of the concept of self (Stephens, 1991; Wylie, 1974; Blau, 1956). Since the self-reflective theory tells us that a consumer who feels “old” or “young” (regardless of chronological age) will demonstrate this in their choice of brands, this means that their cognitive age should also align with their perceptions of brand age. Regardless of the chronological age of a brand, their choice should reflect their “feelings” of age.

The literature in branding and marketing applying the concept of cognitive age is rather limited. Investigations about the internal and external validity of cognitive age measures conducted with Americans and Japanese seniors concluded that cognitive age could be a universal concept. The construct seemed to work equally well across these two rather differing cultures (Van Auken *et al.*, 2006; Van Auken and Barry, 2009). An investigation anticipating that older consumers with younger cognitive ages might be identified as more innovative in their consumption, failed to find evidence to support such a proposition (Szmigin and Carrigan, 2000).

Additionally, some studies have examined cognitive age in the context of specific sectors and services. In the arena of technology usage, Eastman and Yer (2005) investigated the impact of cognitive age of American consumers on their Internet use. The authors concluded that those with younger cognitive ages used the Internet more than those with older cognitive ages. But, in the travel services sector, Serre and Chevalier (2012) suggested that the difference between consumers’ cognitive age and the ideal age was an important consideration when marketing to seniors.

However, it has yet to be demonstrated that consumers’ feelings about age are reflected in their brand selections. No single piece of research has focused on understanding how age related concepts impact consumer’s purchase intentions.

In the context of self-perception, cognitive age has typically been measured in three ways (Stephens, 1991): (1) the single item measure—“Which of the following best describes you ... young, middle aged, or old?” (Blau, 1956; Tuckman and Lavell, 1957; Preston, 1968); (2) the age–decade scale, by which consumers assign to a decade how they look, how they feel, their interests, and what they actually do (Kastenbaum *et al.*, 1972; Barak and Schiffman, 1981); and (3) the semantic differential, which analyzes the difference between various adjective pairs as used to describe an “older person”, a “middle-aged person”, and “you” (Guptill, 1969; George *et*

al., 1980).

Stephens (1991) found that the first two measurement approaches for cognitive age (single item and age–decade scale) were found to be correlated with each other and with chronological age. This was much less pronounced for the semantic differential method, which did not fit as well. Stephens also found that cognitively young seniors were not that much different from the chronologically middle-aged and young. Seniors who were cognitively young exhibited shopping behaviors similar to their younger, middle-aged counterparts.

From an advertising perspective, Barak and Gould (1985) have linked cognitive age with marketing variables. Using psychographic scales, they found that older people who were cognitively young were less likely to be price sensitive, traditional, and old-fashioned. They had more self-confidence and were more likely to dine out, visit, and read. Barak and Gould's (1985) findings contradict earlier research, which claimed that younger people were more likely than older people to try new products (Gatignon and Robertson, 1985). Barak and Gould's counterpoint is that willingness to try new products and services is tied to how old people feel, not to their actual age. Senior citizens, therefore, may be a more attractive target for new products than is realized.

This work in the arena of cognitive age helps us better understand how to measure the phenomenon, and it sheds light on the differences in behavior and attitudes when one's cognitive age differs from one's actual age. These differences in turn can drive different marketing decisions and actions. The findings warrant reappraisal of the value of marketing new products and services to seniors who may have been considered unreachable and/or unmovable. But, the work offers no insight into how much correspondence there may be between cognitive age and perceived age of brands.

Gwinner and Stephens (2001) reviewed prior research in which cognitive age had been examined in terms of antecedent variables as well as behavioral outcome variables. While the authors generally concluded that the cognitive age literature construes the concept as a mediating variable through which various antecedents (e.g., demographics) influence marketing outcomes, they noted that there has been no empirical testing of this relationship. They found that cognitive age was negatively correlated to information seeking and new brand trial, while being positively correlated to cautiousness. These findings imply that if the individual has a self-perception of age that is older, he/she will be less open to trying new brands and products.

Research Design and Sample

This study was based on a two-phase online survey (Pilot and Main Phases) with US-based adults 18 years of age or older. The I-Say Consumer Household Panel sponsored by Ipsos-North America served as the sample frame for this research. At the time of the survey, the I-Say Consumer Panel consisted of approximately 440,000 consumers across the US. Ipsos NA achieved survey quotas by age, gender and region and monitored survey progress to ensure proper completion of both phases of the research.

The Pilot Phase survey was conducted online among 102 consumers across the US. The objective was to understand participants' age perceptions of brands within 5 product categories: chocolate, air fresheners, household cleaners, toothpaste, and shampoo. In each category, approximately 25 brands were shown to each survey respondent. Five questions were asked to help establish the baseline perceptions of age of the brands in each category.

The pretest yielded 2 brands within each consumer product category: one that was relatively newer in its age perceptions and the other relatively older in its age perceptions. The pretest results yielded 2 well-suited product categories for the Main Phase: air fresheners and household cleaners. These categories were selected based primarily upon consumers' ability to demonstrate awareness of the brands in each category and to perceive relative differences in the ages of these brands. Both categories had several brands that could reasonably be categorized as older or newer. Within air fresheners, Glade and Febreze were chosen as the relatively older and newer, respectively. Similarly, within household cleaners, Pledge and Orange Glo were chosen as the older and newer brands for the second, main phase of the research.

In the main phase of the research, there were a total of 8 cells, utilizing a 2 x 2 x 2 experimental design with approximately 250 consumer evaluations per cell as shown in Table I. The perceived age of the brand, the revelation of the brand name, and the product categories defined the cells. Each respondent was asked to review two product concepts (i.e., the test cells)—one from air fresheners and one from household cleaners. Each respondent was randomly assigned two concepts to evaluate—A and E, B and F, C and G, and D and H. Upon reviewing each concept, a series of questions related to their attitudes, age perceptions and purchase intentions were administered.

Purchase intentions were measured using a simple 5-point, fully anchored scale of: (1) definitely will not buy, (2) probably will not buy, (3) might/might not buy, (4) probably will buy, or (5) definitely will buy. A comprehensive survey of custom marketing research agencies, advertising firms, consultancies and academic modelers found this to be the most frequently used measure of purchase intentions (Johnson, 1979).

The four product concepts (A–D) referred to the household cleaners. Another four product concepts (E–H) were developed for Glade and Febreze in the air fresheners category. In the unbranded test cells (B and D, F and H), the older versus newer context of age was cued via the introductory sentence. In the branded test cells (A and C, E and G), perceived age was implicit to the brands selected from the pilot phase, since they were found to be age divergent in the preliminary round of research.

Hypotheses and Results

The research goal was to determine the validity of two hypotheses.

H1: Perceived Brand Age is positively related to the perceived age of the brand user of that product. This tests the belief that “old” brands are used by “old” people.

In addition to reporting their purchase interest with regard to each of the new product concepts they considered, respondents were asked to estimate the age of the person who would use this brand. The goal was to determine if there is any association of the perceived age of the product with the perceived age of the person who would use the brand.

By design, each cell in the experiment represents a “newer” or “older” branded product. If H1 holds, one would expect to find differences between the perceived ages of the brand users across these cells. For example, under H1, consumers should believe “older” brands will attract consumers who are “older”. Thus, one would expect to see statistically significant differences in the perceived age of the brand users between Pledge versus Orange Glo, as well as between Glade versus Febreze.

In comparing the mean perceived ages of the brand users within the four household cleaner cells as well as the four air freshener cells, no statistically significant differences in the average perceived ages were found. These results are shown in Tables II and III.

Lastly, a similar set of analyses were undertaken using the Darpy and Levesque (2005) brand-age classification method. “High” and “Low” groupings were created based on how consumers scored the brands using the D and L scaling method. These groupings were then compared to the perceived age of the brand user. Once again, one would expect to see differences in the cells, but no statistically significant differences were found between the test cells under this method. These results are shown in Table IV.

Implications

This analysis sought to determine if an “older” or “newer” brand is necessarily associated with an older or younger brand user. No support for H1 was found from basic examination of the cells in the test design.

From brand management, marketing and advertising perspectives, it remains highly questionable that when an older, well-established brand launches a new product, the demand for this product will automatically skew towards an older customer (or vice-versa).

H2: Perceived Brand Age is positively related to Cognitive Age in the selection of brands to purchase. This tests the supposition that those who feel older use brands they believe are older.

This tests the supposition that those who feel older use brands they believe are older and vice versa; essentially, brand selection should be aligned with how one feels about him or herself. In the context of the test design of this research, one would expect those who feel either older or younger to select the brands that have been pre-identified as “older” or “newer”, respectively.

Examining this hypothesis requires that respondents be categorized according to their self-perceived cognitive age and the purchase intentions of each cognitive age group be compared. Cognitive age was established using the self-described measure of “old, middle-aged or young”.

Purchase intention (PI) scores for each test cell within each cognitive age segment are shown in Tables V and VI, for household cleaners and air fresheners, respectively.

Review of the mean purchase intention scores within each cognitive age group should show significant differences in the PI scores across the test cells, if H2 is to be supported. In comparing the mean PI scores within each cognitive age segment (young/middle/old), both for household cleaner cells and air fresheners, no statistically significant differences in PI scores were found.

The results of this analysis must drive one to question the premise that someone who feels “older” is necessarily predisposed to select a brand or product that he/she perceives as “older”. In short, the selection of a brand offering is not highly dependent upon the alignment between the cognitive age of the individual and the perceived age of the brand. As with H1, one cannot immediately conclude that cognitively older people only use “older” brands, or that cognitively younger people use only “younger” brands.

Recommendations for Future Research

Products in the two categories selected for this study – air fresheners and household cleaners – are inexpensive and have little to no effect on consumers’ own images. Therefore, a question remaining is whether the findings of the experiments reported in this article would be different if high-involvement, expensive, image oriented products had been tested. Consequently, the authors suggest and are considering replicating the experiment using durable goods, such as luxury cars. A possibility under consideration is the assessment of the perceived age of the brands such as Cadillac, Lincoln, Buick, Jaguar, Mercedes, BMW, Infiniti, Acura, etc. to further investigate potential relationships between brand age, cognitive age and brand selection.

Conclusions

This research examined the relationship between the perceived age of brands, the perceived age of their users and self-perceived, cognitive age. It sought to determine if there was any alignment between these variables, under the premise that “older” brands are oft preferred by “older” people, and vice-versa. The variables of perceived age of the brand user and cognitive age were examined in relation to purchase intentions for brands that were previously classified as “older” or “younger”.

The research found no clear and consistent indication that individuals who feel “older” will necessarily choose brands that are deemed “older”. This includes consumers’ perceptions about the age of the brands, the age of the brand users and their own self-perceptions of age.

This result provides fodder for marketing contrarians; it is far too easy to believe that alignment between the “age” of the individual and the “age” of the brand is a requirement for a product’s success. This research tends to refute such a claim and may also help explain why nostalgia

brands have had some success in recent years across broad populations, to the surprise of many marketers.

Lastly, it is important to recognize that there are some naturally occurring caveats around this research:

- (1) first, one cannot assume that these results can be extended to a wide range of brands, products or product categories, as it was limited to the consumer goods space; and
- (2) the research was conducted and analyzed using a wide range of individuals nationwide; the sample was a cross-section of ages, genders and geographic regions. It may not hold for specific subgroups.

Finally, this research also points to several possible avenues of investigation for other researchers to pursue:

- (1) determination if these results would hold outside of the consumer goods category;
- (2) incorporation of price, which was knowingly excluded from this research. Subsequent research might explore the impact different price points/price levels, relative to perceived brand age; and
- (3) the possible influence of advertising. Although the brands selected were generally well-known amongst consumers, the research did not take into account current or past advertising efforts or expenditures.

Certainly, the list of research possibilities presented above is not all-inclusive and is limited only by the imagination of the researcher and governed by the body of existing knowledge in this area.

Table I

Number of participants in survey of consumer goods—categories 1 and 2

CELL (Age x Branding)

Age of Brand	Brand Name Revealed (n)	Brand Name NOT Revealed (n)
Pledge = “old”	257 (Cell A)	246 (Cell B)
Orange Glo = “new”	245 (Cell C)	252 (Cell D)

Consumer Goods Category 2—

Air Fresheners

CELL (Age x Branding)

Age of Brand	Brand Name Revealed (n)	Brand Name Not Revealed (n)
Glade = “old”	257 (Cell E)	246 (Cell F)
Febreze = “new”	245 (Cell G)	252 (Cell H)

Table II**Perceived age of brand user—household cleaners**

	Pledge	Unbranded Cleaner “Old”	Orange Glo	Unbranded Cleaner “Newer”
Percent Base	257	246	245	252
Teens	2.72%	2.85%	2.04%	3.17%
20s	9.34%	9.35%	6.53%	13.89%
30s	34.24%	40.65%	38.37%	39.29%
40s	34.63%	35.77%	36.33%	28.97%
50s	12.84%	7.72%	11.02%	9.92%
60s	3.89%	3.66%	3.27%	3.17%
70s	2.33%	0%	2.45%	1.59%
Mean age	36.6540	34.7150	36.7350	34.4440
Standard deviation	11.613	9.924	10.90	11.40
Standard error	.724	.633	.696	.718
Mean, upper limit 95%	38.082	35.963	38.108	35.860
Mean, lower limit 95%	35.226	33.467	35.362	33.028

Table III**Perceived age of brand user—air fresheners**

	Glade	Unbranded air freshener “old”	Febreze	Unbranded air freshener “new”
Percent Base	257	246	245	252
Teens	3.50%	4.88%	4.08%	3.97%
20s	14.79%	13.01%	13.06%	14.29%
30s	40.08%	36.18%	41.22%	36.90%
40s	26.07%	30.49%	28.57%	28.57%
50s	8.17%	11.38%	7.76%	9.92%
60s	4.67%	3.25%	3.67%	4.76%
70s	2.72%	0.81%	1.63%	1.59%
Mean age	34.553	34.35	34.041	34.683
Standard deviation	12.37	11.508	11.505	12.055
Standard error	0.772	0.734	0.735	0.759
Mean, upper limit 95%	36.075	35.79745	35.49042	36.17975
Mean, lower limit 95%	33.031	32.90255	32.59158	33.18625

Table IV**Perceived brand user age segmented by Darpy & Levesque Brand Age—household cleaners and air fresheners—low vs. high D&L score**

	Cleaners D&L score 30 or less ("older")	Cleaners D&L score 31 or more ("newer")	Air fresheners D&L score 32 or less ("older")	Air fresheners D&L score 33 or more ("newer")
Percent base	531	469	524	476
Mean age	36.234	34.968	34.676	34.118
Standard deviation	11.481	10.452	12.479	11.138
Standard error	0.498	0.483	0.545	0.511
Mean, upper limit 95%	37.21257	35.9171	35.74693	35.12212
Mean, lower limit 95%	35.25543	34.01891	33.60508	33.11389

Table V**Summary of purchase intentions—mean PI score by cognitive age of user— household cleaners**

<i>“Which of the following best describes you?”</i>	Pledge	Unbranded cleaner “old”	Orange Glo	Unbranded cleaner “new”
Percent base—young	72	74	68	65
Young—mean PI	3.25	3.5541	3.4118	3.1846
Standard deviation	1.1227	1.0222	1.1999	1.1712
Standard error	0.1323	0.1188	0.1455	0.1453
Mean, upper limit 95%	3.5135	3.7907	3.7016	3.474
Mean, lower limit 95%	2.9865	3.3175	3.122	2.8952
Percent base—middle-aged	160	146	147	158
Middle-aged—mean PI	3.4313	3.3836	3.2993	3.3671
Standard deviation	0.9223	0.9041	0.9891	0.9798
Standard error	0.0729	0.0748	0.0816	0.0779
Mean, upper limit 95%	3.5759	3.532	3.4612	3.5217
Mean, lower limit 95%	3.2867	3.2352	3.1374	3.2125
Percent base—old	25	26	30	29
Old—mean PI	3.32	3.5385	3.4667	3.1724
Standard deviation	1.1446	0.706	0.8996	0.9285
Code standard error	0.2289	0.1385	0.1642	0.1724
Mean, upper limit 95%	3.7915	3.8238	3.805	3.5275
Mean, lower limit 95%	2.8485	3.2532	3.1284	2.8173

Table VI**Summary of purchase intentions (PI)—mean PI score by cognitive age of user— air fresheners**

	Glade	Unbranded air freshener “old”	Febreze	Unbranded air freshener “new”
“Which of the following best describes you?”				
Percent base—young	72	74	68	65
Young—mean PI	3.3889	3.6081	3.75	3.5385
Standard deviation	1.1203	1.1446	1.1113	1.1467
Standard error	0.132	0.1331	0.1348	0.1422
Mean, upper limit 95%	3.6525	3.8739	4.0192	3.8225
Mean, lower limit 95%	3.1253	3.3423	3.4808	3.2545
Percent base—middle-aged	160	146	147	158
Middle-aged—mean PI	3.5625	3.4589	3.5238	3.3165
Standard deviation	1.068	0.9905	1.1307	1.0533
Standard error	0.0844	0.082	0.0933	0.0838
Mean, upper limit 95%	3.7299	3.6216	3.7089	3.4828
Mean, lower limit 95%	3.3951	3.2962	3.3387	3.1502
Percent base—old	25	26	30	29
Old—mean PI	3.16	3.5385	3.7333	3.3103
Standard deviation	1.179	0.9047	0.9803	1.0387
Standard error	0.2358	0.1774	0.179	0.1929
Mean, upper limit 95%	3.6457	3.9039	4.102	3.7077
Mean, lower limit 95%	2.6743	3.1731	3.3646	2.9129

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Valuing Diversity through a Career Development Paradigm Shift: A Framework for Change

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ABSTRACT

Diversity has become a panacea for all things different within many workplaces. There is no clear definition for the term, and the term diversity has almost become passé; thus, diminishing its significance to the individuals it was intended to strengthen within the workplace. Diverse individuals' careers have been derailed, under nourished, and ignored despite all of the diversity efforts espoused by organization leaders. A career development paradigm shift is occurring and must be exposed for diverse individuals to be valued within the workplace. The Hughes Competitive Advantage Framework and People as Technology Model is a career management framework that can be used to explain and describe ways that diverse individuals' value can benefit both the individuals and the organization.

Key Words: Diversity, Values, and Career Development

Introduction

Is diversity a legal or ethical issue?

There are many debates regarding diversity, but there are no clear, definitive definitions and interpretations to which all organizations and individuals adhere. The management of diversity is not a legal issue. To date, there are no known state laws, federal legislation, or municipal statutes leveling the requirement of diversity on any situation. Further, there are no court cases at any level that make diversity a mandate in the workplace or any other institution. (Hughes & Stephens, 2012, p. 267)

Diversity is often mistaken for Equal Employment Opportunity (EEO) and Affirmative Action (AA); however, diversity goes beyond the legal requirements that EEO and AA provide (Kelly & Dobbin, 1998). “[F]or many organizations, the definition of diversity has evolved from a focus on legally protected attributes such as race, gender, and age to a much broader definition that includes the entire spectrum of human differences” (Jayne & Dipboye, 2004, p. 410). The Hughes Competitive Advantage Framework and People as Technology Model framework promotes workforce inter-personnel diversity and examines a wider spectrum of human difference in the workplace (Hughes, 2012). Inter-personnel diversity, as defined by Hughes (2012), represents the unique difference of each individual employee regardless of whether or not they are of the same race, culture, or are doing the same job. Each individual is different. Thus, the personnel within an organization have inter-personnel diversity. “Building support for

a diversity initiative requires a clearly defined strategy for communicating the business case and clear roles and responsibilities for the senior leadership team, managers, and employees” (Jayne & Dipboye, 2004, p. 418). Marques (2007) explains, “If conscientiously applied and facilitated at all levels, diversity can elevate an organization's long term performance to levels that are beyond all expectations” (p. 24). “Diversity is not a legal issue but rather a constructive mindset, strongly influencing individuals and organizations toward strategic thinking, interactive and collective discourse, and ethical behavior” (Hughes & Stephens, 2012, p. 268).

Definitional Challenges

It is difficult to manage what has not been defined. Without a clear definition of diversity, there is utter confusion within organizations with regards to how to manage diverse individuals and diversity initiatives. Individuals within organizations do not agree with organization sanctioned definitions of diversity (Banks, Collier, & Preyan, 2010). This lack of a definition and disagreement with chosen definitions of diversity must be resolved if organizations are to increase and manage diversity efforts.

Diversity as a Panacea

Intentionally or unintentionally, all things different amongst employees within many workplaces are identified as diversity; therefore, its significance has resulted in its diminishment of effectiveness for individuals it was intended to strengthen within the workplace. All things different should be acknowledged as different and the word diversity should be used for its legal purposes of non-discriminatory practices and not at the whims of individuals who do not understand the implications of its misuse nor the historical significance that led to the legal mandates.

Some researchers distinguish between diversity efforts by using the term cultural diversity (Banks, 2001; Cox, 1994; Cox & Blake, 1991; Ely & Thomas, 2001). Cultural diversity is still broad enough for the unenlightened to make stereotypical assumptions of sameness within identity groups (Banks, 2008; Beatty & Kirby, 2006; Htun, 2004; Purdie-Vaughns, Steele, Davies, Ditlmann, & Crosby, 2008) which may or may not be valid.

Diversity and Career Development

Career development professionals are often asked to help manage the careers of diverse employees. It is difficult for them to integrate diverse individuals within their strategies without a clear and agreed upon definition. Competing forces within the same organization reduces effectiveness. For example, should they focus on the disabled, women, American minorities, or international minorities? In many organizations, despite of the organization’s pledge to increase diversity, these groups of employees are lumped together as one diverse group and true protected class, minority groups, as defined by legal mandates, are diminished and/or ignored. One example of this is Africans are classified as African Americans when clearly they are not. The term African American should be changed to American blacks ideally Americans.

Workplace diversity is managed by individuals with the power and structural position inside organizations to influence or diminish its success. The central position of individuals (Brass & Burkhardt, 1993; Burkhardt & Brass, 1990; Pfeffer, 1994) with leadership influence to improve diversity must be empirically studied and understood to determine the status of diversity of efforts. A better understanding of the impact of diversity on organization performance can enhance the formulation of a strategy to manage diversity and connect it to the organization's career development plan (Pitts, 2006). Policies that encourage diversity and career development improve women and minorities' desire to remain in the organization (Pitts, 2006). Avery (2011) suggested that diversity should be prioritized and that through their human resource management policies and procedures, organizations have a considerable impact on the diversity climates they facilitate and the employees they attract and retain. If they wish to encourage employee diversity activism, it is imperative that they take steps to ensure that the climates, supervisors, and coworkers employees routinely encounter convey that diversity is valued and supported. (p. 252)

Career development leaders within organizations are included in the human resource management area. Effective career development requires a supportive climate, supervisors, and coworkers for diverse employees to feel comfortable interacting with mentors (Bingham, Gewin, Hu, Thomas, & Yanchus, 2005; Thomas, 2008). The organization's culture must be accepting of diversity and career development (Avery, 2011; Deal & Kennedy, 1984). Diverse individuals entering the workplace must prepare to develop their careers despite organization constraints. Organizations must also do their part to ensure their leaders value the diversity of their workforce and treat all employees fairly.

Purpose

The purpose of this study is to provide methods by which the Hughes' Competitive Advantage Framework and People as Technology Model can be used to assist organization leaders in understanding inter-personnel diversity. It can also be used to effectively manage employee career development to strengthen organizations' diversity efforts and competitiveness. Without proper integration into career development strategies, diversity efforts have been shown to be less successful.

Literature Review Process

The literature review examines and summarizes empirical research on diversity, career development, and values. Online databases including ProQuest, ERIC, PsycARTICLES and tools such as Google Scholar and Internet Journals were searched using the key words career development, values, diversity, people development, and talent development. The search of these descriptors included articles from the early 1900's through present day. This search produced numerous articles and sources related to the topics. Close examination of upwards to 100 of these sources led to the referencing of over 50 of the sources. The references were screened for their relationship to diversity and career development of employees.

Literature Review

Failure of Diversity Efforts

Protected group or protected class is a federal government term for diverse employees who are legally protected from discrimination in the workplace. Protected class diverse individuals' careers have been derailed, under nourished, and ignored despite all of the diversity efforts espoused by corporate leaders (Thomas, 2008). The placement of an individual into a protected group, as identified by the *Civil Rights Act of 1964*, is based upon race, color, national origin, sex, religion, age disability, and family medical history and genetic information (Performance and Accountability Report, 2013) Differences between employees should be acknowledged without limiting the term diversity to the visible, known differences that are sometimes expressed through discrimination and/or stereotyping (Hughes, 2012).

Organizations seek ways to show their employees that they are all being treated fairly within the workplace; yet, there continues to be instances of disparities. The disparities are witnessed through the Equal Employment Opportunity Commission (EEOC) and Department of Labor (DOL) settlements, the numerous lawsuits, and workplace disputes. According to U.S. EEOC Chair Berrien, the EEOC filed 21 systemic lawsuits in Fiscal Year 2013 and “secured a record \$372.1 million in monetary relief for victims of employment discrimination in private sector and state and local government workplaces” (Performance and Accountability Report, 2013, vi). Employees indeed differ in their perception of whether or not they are treated fairly within the workplace despite attempts by organizations to prove that their systems and policies regarding procedural justice are followed (Folger & Greenberg, 1985). This same disparity is perceived when employees observe organizations continuously investing in new equipment/technology and less investment in employees.

As the workforce becomes more diverse with the inclusion of older people, more women, and the increased number of minorities along with disabled individuals, it is critical for organizations to understand that just providing their leaders with training in legal aspects of discrimination is not enough. They must be able to discern and document clear differences between employees, not from a negative perspective as is usually the case, when illegal discrimination is a concern. Discrimination becomes a concern when there is not clear delineation between what is expected (Vroom, 1964; 1995) of an employee and what their performance evaluation indicates (Campbell, 1990).

Career Development Paradigm Shift

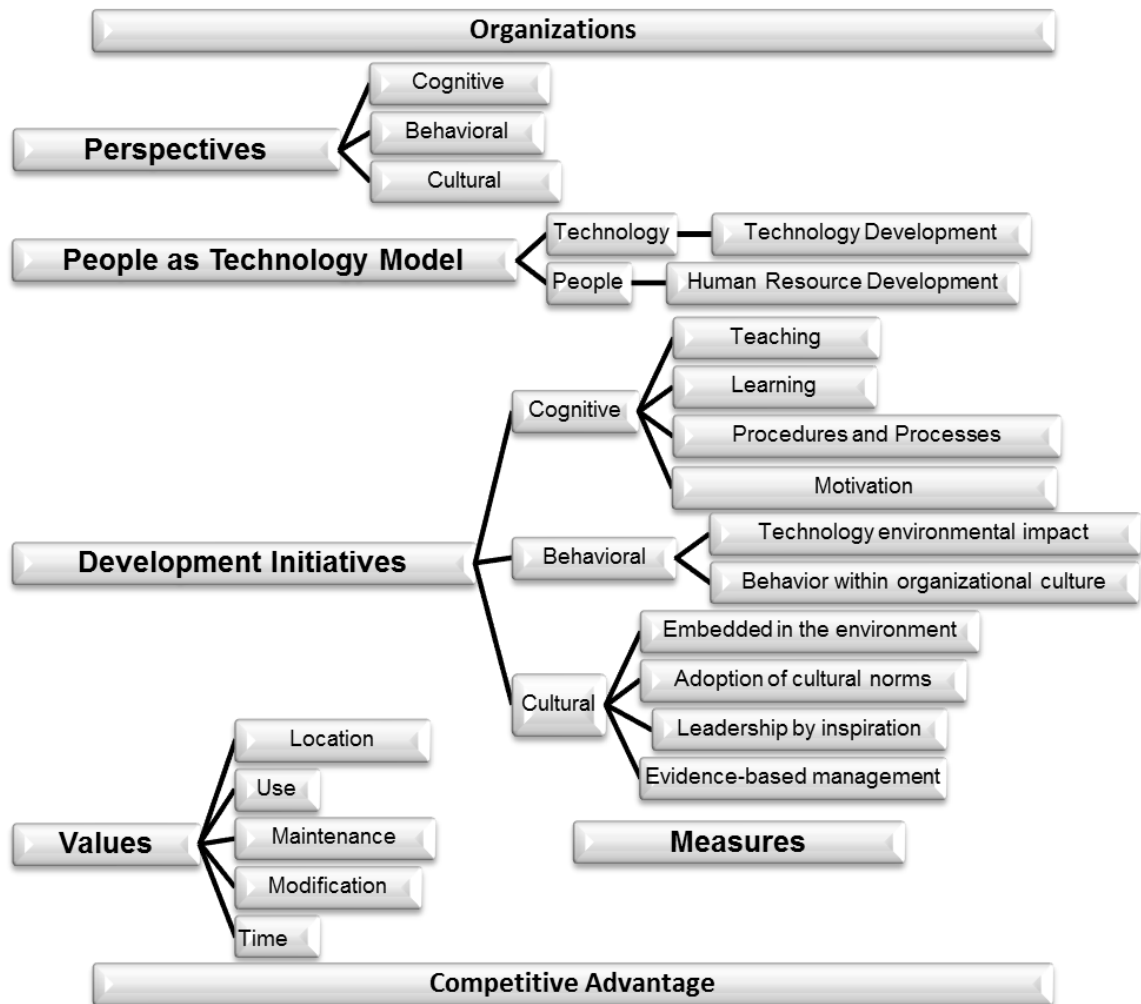
There is a career development paradigm shift occurring, and it must be exposed for protected class, diverse individuals to be valued within the workplace. Organizations must expand beyond the typical career development models and understand how diverse employees can influence the development of new models (Banks, 2006). Many employees move from job to job seeking a career because they do not have a plan or the organization's career development plan does not include them (Banks, 2006; Hayes, 2000; Karsten & Igou, 2005).

Hughes' Competitive Advantage Framework and People as Technology Model and Inter-personnel Diversity

Boudreaux (2001) suggested that career development should focus “on the alignment of individual subjective career aspects and the more objective career aspects of the organizations in order to achieve the best fit between individual and organizational needs as well as personal characteristics and career roles” (p. 806). Hughes' (2012) Competitive Advantage Framework and People as Technology Model (See Figure 1) aligns with the personal characteristics of the employees and how organization leaders can learn to manage the characteristics in ways similar to those described by Becker's (1992) human capital theory.

Figure 1:

Hughes' Competitive Advantage Framework and People as Technology Model



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Hughes (2012) aligned her Competitive Advantage Framework and People as Technology Model to the personal characteristics of employees as follows:

1. Location value: Aligned with the personal characteristics that the employer assesses prior to hiring the individual.
2. Use value: Expressed in the cover letter, resume, and interview responses provided by the individual.
3. Maintenance value: Alignment of employee KSAs with organization needs expressed by job analysis and job description and the alignment with the employee KSAs. Organization must see potential for employee growth during the hiring process.
4. Modification value: Acknowledged through the drive and ambition that the employee expressed with regards to their goals and aspiration for wanting the offered job and experience working for the organization.
5. Time value: Seen through the quality of work produced, presence at work, and the amount of work done when presented with work to do.

Individual benefits through understanding how to convey the five values through their performance and personal characteristics. The organization profits by rewarding and showing appreciation for work efforts of dedicated employees.

Location Value

The focus of location value relies on not only an individual's capability but also the total organization's capability to recognize and maximize an employee's contribution. Concentrating on the organization's capability allows better diversification of talent across multiple levels of the organization. This is a contemporary, pragmatic approach to diversity management that encourages the elimination of the cultural and environmental barriers that prevent the promotion of diversity in the overall career development scheme. It may be in the organization's best interest to establish transparent career paths for its employees so that they can have some control over and better management of employee location value (Hughes, 2010) throughout the organization.

Use Value

Organizations must provide operating procedures for employees that include adequate, clear, and consistent feedback regarding an individual's actions and how those actions translate into performance (Kerno & Kuznia, 2007). The ability of organizations to provide detailed performance criteria and feedback to employees helps to enhance employee use value (Hughes, 2010) by ensuring that all employees are on the job contributing and delivering value. The value of diverse employees within organizations is essential to productivity, competitive advantage, and long-term performance strategy. Usually it is when employee decides to change jobs or circumstances force him or her to change jobs that the employer and even the employee begins to realize his or her true use value. The use value of the employee contributes directly to the transformative power of workplace diversity.

Maintenance Value

Employee maintenance value is expressed through training and development, and motivation. Employees come to organizations with different KSAs that must be nurtured and nourished to that the employees can maintain optimum job performance. Leaders must recognize diversity amongst the personal characteristics of employees performing the same job. Not all employees need the same type of on-the-job training at the same time. Just-In-Time (JIT) training (Duffy & Jonassen, 1992; Collins, Greer, Kumar, McCalla, Meagher, & Tkatch, 1997; Nishisaki, Donoghue, Colborn, Watson, Meyer, Brown III, Helfaer, Walls, & Nadkarni, 2010) provides an opportunity for employers to meet the varied needs of individual employees and tracks their success in measurable ways. There is no longer a requirement for classroom training that employees must sit through just because they perform the same task. To increase or maintain the motivation levels of employees, employers must begin to recognize and reward differences.

Modification Value

Modification of people within the context of the five values model is to look at how the person grows and changes not only through activities provided by the organization, but also activities that people use for self-development including education that may or may not align with their current jobs. Viable organizations should always have employees who are growing and changing and adding to the diversity of the organizations strengths.

Time Value

Time value of an employee to an organization is often expressed through his or her length of service or time to execute assigned job tasks. If the employee is not there or cannot perform the job task in a specific amount of time, he or she represents no measurable value to the organization. The speed of some employees to perform tasks is much better than others; yet, many organizations expect employees to perform the same amount of work in the same amount of hours with no difference in pay. There is essentially no motivation for the faster worker to perform more work. This is a clear area where diversity can be leveraged by leaders to make significant contributions to the motivational level of employees.

The five values, when recognized and understood, allow for workforce differences to enhance organization performance. They allow leaders the ability to clearly articulate measurable differences between employees without hindering or discriminating against another employee's the ability to perform. There are instances where employees feel slighted due to physical differences such as height, weight, and other characteristics; however, if the employees are allowed to see all of their own strengths within the five values and how they align with organization goals, these differences may not be seen as barriers to success.

Leaders' Use of the Five Values to meet Workforce Diversity Goals

Leaders have significant influence over institutional processes (Ashforth & Anand, 2003). Thus, leaders' use of the five values can play a productive role in the organization's ability to meet its workforce diversity goals. The five values will help leaders gain a better understanding of all

employees and technology within their workplace. This understanding should allow a leader to better integrate diversity based upon objective as opposed to subjective criteria of assessment.

Questions a leader could consider would be:

1. Is the employee located on a job that best suits his use value to the organization?
2. Does the training and development provided to the employee align with the maintenance value of the employee?
3. As the modification value of the employee increases through the employee's own self-development, is the organization able to leverage the strengths of the employee to organization goals?
4. As the time value of the employee increases, does the organization provide opportunities where they show the employee that his time is needed, valued, and treasured?
5. Can the organization leaders clearly articulate how the five values align with the organization's performance evaluation criteria?

Understanding the Hughes' Competitive Advantage Framework and People as Technology Model will provide organization leaders with a specific system to reduce the perception of unfairness (Hughes, 2010). When an employee has a tool that shows his personal location value, use value, maintenance, modification, and time value, the information from the tool will highlight for the employee that he is indeed different, not just based upon known, visible differences, but in role and contribution to the organization.

Employee Performance Evaluation for Diversity Management

There are many factors defined in the literature that may influence evaluators to provide accurate employee performance evaluations (Arvey & Murphy, 1998), but there are no empirical studies that explicitly define and support those factors. Banks and Murphy (1985) suggested that evaluators do not fail to give accurate evaluations because they are not capable of accuracy, but they are unwilling to evaluate accurately. Murphy and Cleveland (1991) also stated, "Raters do not fail to give accurate ratings because they are incapable of accuracy but rather because they are unwilling to rate accurately" (p. 209). The question of evaluators' unwillingness to provide accurate performance appraisals centers upon their personal motivations (Harris, 1994). Personal motivation may be a contributing factor in the success and/or failure of diversity efforts.

Many organizations conduct summative or yearly evaluations which seek to determine the overall performance on a yearly basis; however, formative evaluations aim at improving performance on a daily, weekly, or monthly basis may be more appropriate (Welch, 2005). Conducting yearly evaluations provide little opportunity for employees to improve their performance throughout the year without a system of continuous feedback (Banks, 2006).

Motivation exists when there are both positive outcomes and a connection between behavior and the outcomes (Banks, 2002). Organization leaders must know that there are positive outcomes if their behavior contributes to the positive outcomes. Viswesvaran (2001) stated that “although a person’s job performance depends on some combination of ability, motivation and situational constraints, it can be measured only in terms of some outcomes” (p.114). Upon achievement of the desired outcome of evaluator ability and motivation to conduct accurate performance evaluations, organizations and evaluators may have a powerful tool, accurate performance evaluations with which to enhance organization, ratee, and evaluator goals.

Evaluator Ability

Six factors that influence evaluator ability are communication of policy, understanding of policy, frame of reference training, time, motivation and rewards, and accountability.

Communication of Policy

Organizations use many methods to communicate policy to evaluators. They must, however, be careful to ensure that evaluators do not receive unintended messages. Cleveland and Murphy (1991) found that “organizations rarely reward good raters or punish bad ones” (p. 159). The message that may be inferred by the evaluator from this type of action of the organization is that the organization does not care about accurate performance evaluations. The evaluator’s ability to provide accurate performance appraisals has also been linked to organization policy. Cleveland and Murphy (1992) stated that organizations “create conditions that motivate raters to provide accurate ratings when they can establish and implement a clear policy linking the quality of the rating data to rewards” (p.172). The policy must be clearly communicated to the evaluator.

Understanding of Policy

It is not enough for organizations to just communicate policy to evaluators if they want accurate appraisals. They must also address the following three issues: valued rewards must be tied to rating behavior; negatively valued outcomes of accuracy must be reduced; and evaluators must see clear links between their rating behavior and valued outcomes (Cleveland & Murphy,1992). When evaluators understand how policy can have an impact upon them, their motivation to provide the desired outcomes may increase. Organizations must also ensure that procedures that are likely to produce accurate ratings are articulated to and understood by the evaluators (Murphy & Cleveland, 1992; Tziner, Murphy, & Cleveland, 2001). Organizations must also be careful to understand the capability of the evaluators and not ask them to try to execute performance appraisals using policies and procedures that are conflicting or unclear (Murphy & Cleveland, 1992).

Frame of Reference (FOR) Training

Training has been suggested to be one method of improving evaluators’ ability to provide accurate performance appraisals. Specifically, Bernardin and Buckley (1981) suggested that the establishment of a common frame of reference for observing and rating would enhance rating

accuracy. FOR training teaches the rater to place emphasis on the performance of the ratee (Day & Sulsky, 1995). By emphasizing the focus of the rater, improved accuracy has been seen in research studies such as the 1994 meta-analysis completed by Woehr and Huffcutt. As stated by Bernardin, Buckley, Tyler, and Wiese, 2000, Woehr and Huffcutt demonstrated that FOR training led to the “largest overall increase in rating accuracy of the four training methods evaluated. They [also] concluded that FOR training is effective when evaluators are trained on a specific theory of performance and the result is an increase in rating accuracy when FOR is applied to a performance evaluation task” (p. 228). Bernardin et.al (2000) also believed that the “major transferring element of FOR training was experience with clearly defined and precise performance criteria and the use of these criteria as a context for the observation and subsequent rating of performance” (p. 268). FOR training may also be relevant for organization leaders as they implement diversity efforts.

Time

Time is considered to be an important factor with regards to evaluators’ ability to provide accurate performance appraisals. Research has shown that conscientiousness affects job performance and “[p]erformance appraisal often occupies only a minimum of the busy supervisor’s time” (Cleveland & Murphy, 1992, p.159). Viswesvaran (2001) also noted that “conscientious individuals are likely to spend more time on the task and less time daydreaming. This investment of time will result in greater acquisition of job knowledge, which in turn will result in greater productivity and which in turn will result in positive ratings” (p. 122). Similarly, evaluators who are conscientious may provide accurate performance appraisals for ratees. Lack of time was regarded by supervisors as a major reason for inaccuracy within performance appraisals (Bernardin & Villanova, 1986; Murphy, 2008; Tziner et al., 2001). Organization leaders must also invest time to effectively implement diversity efforts.

Motivation and Rewards

The theory of motivation deals with attitudes concerning needs, values, and satisfaction (Porter & Lawler, 1968). Two of the most often-used motivation theories are drive and expectancy theory (Vroom, 1964). Both theories focus on the concept that people have behavior response “expectations” or “anticipations” about future events. Porter and Lawler (1968) indicated that in order for motivation to exist there must be both positive outcomes and some kind of connection between behavior and the outcomes.

The differences between the theories are that expectancy argues that the anticipation of the positively valent outcome functions selectively on actions which are expected to lead to it. Drive theory views the magnitude of goal as a source of general excitement – a nonselective influence on performance. (Porter & Lawler, 1968, p. 11)

The drive theory concept of habit strength emphasizes past stimulus-response connections, and thus weights past learning heavily. Expectancy theory (Vroom, 1964; 1995) places a greater emphasis upon anticipation of the future than upon past learning (Porter & Lawler, 1968). Thus, if there is no future consequence for an evaluator to complete an accurate performance evaluation, he is less apt to do so. Old habits are hard to break. Subsequently, if there is no

consequence for not completing diversity efforts, leaders are less apt to do so as well.

Vroom (1964) first proposed expectancy theory as an explanation of work behavior. He proposed three related models related to his theory. The models included a job satisfaction, work motivation, and job performance (Vroom, 1995). His models were developed to address three phenomena within the interrelationship of work and motivation. They are as follows:

1. The choices made by persons among work roles.
2. The extent of their satisfaction with their chosen work roles.
3. The level of their performance or effectiveness in their chosen work roles (Vroom, 1995, p.7).

Evaluators must determine if their choice of jobs and the implications for their completing accurate performance evaluations of their subordinates align with the effectiveness they expect to exhibit within their chosen job. If they do not receive any satisfaction from conducting accurate performance evaluations, they are unlikely to do so or work to improve their performance.

Ormond (1999) noted that motivation has general effects not limited to increasing an individual's energy and activity level, directing the individual toward certain goals, promoting initiation and persistence in certain activities, and affecting the learning strategies and cognitive processes employed by individuals. By influencing the motivation of the evaluator, there is the potential to obtain the general effects as described by Ormond with respect to the evaluator completing an accurate performance evaluation. Cleveland and Murphy (1992) found that "one factor that influences motivation is rewards" (pp. 144-145). They also suggested that "valued rewards are clearly linked to accuracy in performance appraisal" (Cleveland & Murphy, 1992, p.172).

Harris' (1994) model of rater motivation described situational (accountability, organization HRM strategy, task/outcome dependence, trust, and forms) and personal variables (amount of information, self-efficacy, and mood) that affected motivational factors (rewards, negative consequences and impression management) which in turn impacted performance evaluation behaviors of observations, storage, retrieval, integration, rating and feedback. Harris also suggested that the "effect of rater motivation on accuracy may be an indirect rather than direct effect (1994, p.750).

Murphy and Cleveland (1991) suggested that "the best way to convince raters that they will be rewarded for accurate ratings is to give rewards, in as public a way as possible, to raters who comply" (p.172). Harris (1994) suggested that an evaluator is "uninterested in being accurate, which is most likely caused by a lack of any rewards (p. 751). The reward is only desirable for the evaluator to the extent that it will motivate him to provide an accurate performance appraisal to the ratee. The organization's influence upon the evaluator is discussed under evaluator ability; however, the political environment within the organization can also influence the motivation of the evaluator with regards to providing accurate performance evaluations. The Hughes' (2012) Competitive Advantage Framework and People as Technology Model proposed an opportunity

for organization leaders to create an environment that influences the motivation of supervisors to provide accurate performance evaluations.

The Porter-Lawler (1968) model of expectancy theory has been used primarily to measure supervisor effort, peer effort and self-effort and focused on the value of the reward, the perceived effort required relative to attaining the expected reward, the actual effort, abilities and traits, role perceptions, performance (accomplishment), rewards (fulfillment), perceived equitable rewards and satisfaction. Porter and Lawler’s value of reward variable refers to the attractiveness of possible outcomes to individuals. The major focus is that for any individual, at the particular point in time, there are a variety of potential rewards to which he attaches differential value. The value of the reward to an individual can be measured using several measures such as the Thematic Apperception Test (TAT) or a sentence completion test from which some other person (i.e., the tester) infers the values of different rewards for the individual under consideration (Porter & Lawler, 1968; Vroom, 1964, 1995). Measuring the extent to which rewards influence organization leaders’ diversity efforts may lead to more success.

Factor	Evaluator	Organization Leader
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Accountability

Accountability also plays a role in evaluator motivation. Mero & Motowidlo (1995) showed that evaluators are more accurate when they are held accountable by having to justify their evaluations. However, Harris (1994) found that “increased accountability to subordinates will typically decrease rater motivation to make accurate ratings” (p. 744). Holding evaluators accountable requires a concerted effort by the organization to provide clear, objective tools and resources to make the process as accurate as possible (Murphy, 2008). Understanding of the influence of evaluator ability and motivation on completion of accurate performance evaluation is important to organizations. The studies highlighted here provide support that evaluator ability and motivation may influence evaluators to provide accurate performance evaluations.

With regards to the context of increasing workforce diversity, accurate performance evaluations may be one of the key ways for diverse individuals to feel valued and respected within the organizations. It may also reduce the number of EEOC complaints, labor disputes, and lawsuits associated with diversity and unfairness in the workplace (D’Netto & Sohal, 1999; Fulkerson & Schuler, 1992; Jayne & Dipboye, 2004; Loden & Rosener, 1991; Morrison, 1992; Powell & Butterfield, 1994; Schuler, Dowling, Smart, & Huber, 1992; Schreiber, Price, & Morrison, 1993).

The six factors of evaluator ability are also applicable to the ability of those who evaluate and/or implement diversity efforts within organizations. Similar to evaluators of performance, evaluators of diversity efforts can be studied in a similar manner (See Table 1).

Table 1:

<p>Communication of Policy and Standards of Performance (Cleveland & Murphy, 1991)</p>	<p>Organizations cannot send mixed messages by not rewarding good raters or punishing bad ones.</p>	<p>Diversity leadership can benefit from better communication of policy standards throughout the organization. Execution of diversity policy must be consistent.</p>
<p>Understanding of Policy (Cleveland and Murphy, 1992)</p>	<p>Evaluate rater behavior: Tie rewards to rating behavior; negatively valued outcomes of accuracy reduced; and evaluators must see clear links between rating behavior and valued outcomes. (What is in it for me is addressed); Do not ask evaluators to execute appraisals with conflicting and unclear policies and procedures.</p>	<p>It is difficult to understand a policy when there is no definition and disagreement regarding the terms being used. Legal versus ethical issue of diversity must be delineated.</p>
<p>Frame of Reference Training (Bernardin & Buckley, 1981; Day & Suksky, 1995)</p>	<p>Suggested a common frame of reference (FOR) for observing and rating would enhance rating accuracy; Trained raters to focus on the performance of the ratee.</p>	<p>Leaders can be trained to use the five values as a common FOR to recognize objective differences amongst employees.</p>
<p>Time (Bernardin & Villanova, 1986; Cleveland & Murphy, 1992; Murphy, 2008; Tziner, Murphy & Cleveland, 1991; Viswesvaran, 2001)</p>	<p>Conscientious investment of time; Supervisors noted time as a major reason for inaccurate performance appraisals.</p>	<p>Leaders must conscientiously invest the time to understand differences and this time must be valued by the organization.</p>
<p>Motivation and Rewards (Cleveland & Murphy, 1992; Harris, 1994; Porter & Lawler, 1968; Vroom, 1964)</p>	<p>Evaluators must be motivated and rewarded.</p>	<p>Understanding what motivates organization leaders and rewarding them appropriately may improve diversity efforts.</p>
<p>Accountability (Harris, 1994; Jayne & Dipboye, 2004; Mero & Motowidlo, 1995; Murphy 2008; Schreiber, Price & Morrison, 1992)</p>	<p>Evaluators are more accurate when they have to justify their evaluations; Requires a concerted effort for the organization to provide clear, objective tools to evaluators.</p>	<p>Accountability reduces EEOC complaints, labor disputes, and lawsuits associated with diversity and unfairness.</p>

Six Factors Influencing Evaluator Ability Relative to Organization Leaders Improving Diversity Efforts

These factors can be used to help develop a diversity management tool to improve diversity efforts and subsequently the career management of employees and protected class individuals, specifically. It can also be used to guide inter-personnel diversity within the organization.

Discussion

Career development professionals must be able to recognize and leverage each person's contribution for added success to the organization (Hughes & Stephens, 2012). This type of

difference does not represent the legal diversity effort of the organization and should not be intermingled. Acknowledgement of the differences amongst workers necessitates finding a “fit” between the organization and the individual despite legal requirements (Baird & Meshoulam, 1988; Becker, Huselid, & Beatty, 2009; Delery, 1998; Wright & McMahan, 1992; Vroom, 1973). The Hughes’ Competitive Advantage Framework and People as Technology Model allows for a change by which employee differences to be defined by empirical evidence and not subjective opinions of organization leaders. Career development activities can be determined based upon empirically identified needs of employees and organization. Leaders can value the difference of the workforce and achieve diversity efforts.

There is now an opportunity to integrate Human Resource Development (HRD) and Human Resource Management (HRM) evaluations with diversity leadership efforts. Leadership is a state of mind, not a position or title; and leaders now have a tool to use to strengthen their objectivity. Evaluators fail to give accurate evaluation because they are unwilling to evaluate accurately (Banks & Murphy, 1985; Harris, 1994; Murphy & Cleveland; 1991). Organization leaders may fail to implement diversity efforts because they are unwilling to do so. Table 1 provides an alignment of six evaluator ability factors: that may be useful organization leaders as they attempt to implement diversity initiatives.

Recognition of Paradigm Shift

There are many changes occurring within career development that are influenced by the economic environment, diversity efforts, and societal influences on workplace activities. Table 2 provides a synopsis of past and present changes and implications that these changes present for organizations. Addressing these paradigm shifts and metaphors for change must become a priority if organizations are to succeed with valuing the protected class and inter-personnel diversity found within the current and potential workforce.

Table 2:

Diversity and Career Development Paradigm Shifts and Metaphors for Change

Past	Present	Implications
Diversity Paradigms		
Serendipitous (Betsworth, D. G., & Hansen, J. I. C., 1996)	Intentional (Young, R. A., & Valach, L.,2004)	Formalize the process to institutionalize diversity and increase the population of diverse leaders.
Superficial (Gilbert, & Ivancevich, 2000; Mills, 2008)	Authentic (enlightenment) (Craddock, 2009; Jones, Anand, & Alvarez, 2005; Svejnova, 2005).	Employees seeking authentic diversity leadership.

Fitting In (blending) (Cox, Lobel, & McLeod, 1991)	Adding value through difference (helping others); Focus on results and impact (Barak, Cherin, & Berkman, 1998; Milliken & Martins, 1996)	Assimilation to norms is less relevant. Differences are valued (Purdie-Vaughns, Steele, Davies, Ditlmann, & Crosby, 2008).
System bias (unjust systems) (Gilliland, 1993; Taylor, Masterson, Renard, & Tracy, 1998)	Individual recognition (just systems) (Buckley, Beu, Frink, Howard, Berkson, Mobbs, & Ferris, 2001)	Institutional and implicit bias must be eliminated (Jost & Andrews, 2011).
Prioritize through mandates (Dass & Parker, 1999; Riccucci, 1997)	Strategic priority (Richard, 2000)	Diversity was prioritized because of legal mandates as opposed to a strategic priority of the organization. (Guthridge, Komm, & Lawson, 2008; Jayne & Dipboye, 2004)

Career Development Metaphors and Paradigms

Ladders (Complete dedication) (Baron, Dobbin, and Jennings, 1986)	Jungle gym (Flexibility and necessary sacrifice) (Gunz, 1989; Parker & Inkson, 1999; Sandberg, 2013)	Careers are no longer straight up; varying directions. All in at all cost no longer viable. (Hayes, 2000; Kaye, 1997)
Career Models (Buzzanell & Goldzwig, 1991)	Career Management Systems (CMS) (Baruch & Peiperl, 2000; Dreher & Dougherty, 1997)	Evolving away from traditional career models to CMSs. (Baruch, 2004)
Organization or “Company” Man (Gouldner, 1957; Jacoby, 1999)	Free Agent (Nicholson, 1996; Pazy, 1988).	Employees are managing their own careers and are willing to change jobs. (Rousseau, 2004; Sturges, Guest, Conway, & Davey, 2002)
Manage organization & business needs (Hammer, & Stanton, 1999)	Manage a career (Sullivan, Martin, Carden, & Mainiero, 2003; Raabe, Frese, & Beehr, 2007)	Integration of personal skills with business needs is essential. (Bridgstock, 2009; De Vos, & Soens, 2008)
Face time (hours) (Veiga, 1983)	Quality results (MacDermid, Lee, Buck, & Williams, 2001).	Quality results using time wisely as opposed to being seen. Location value is critical. Focus on results and impact. (Cabrera, 2007; Hughes, 2012; O’Neil, Hopkins, & Bilimoria, 2008; Reitman, &

Schneer, 2003)

Single career option
(Walker, 1976; Hall
& Richter, 1990)

Deciding career choice factors
(Lent, Brown, & Hackett, 1994;
Hall & Mirvis, 1995).

Employees are now able to assess
all factors related to their career as
opposed to having a single option.
(Baruch, 2006; Helfat, Harris, &
Wolfson, 2006; Sullivan & Baruch,
2009)

Valuing Diversity for Career Development Paradigm Shifts

Status quo
(Geletkanycz, &
Black, 2001;
Brayboy, 2003)

Potential for growth or high
demand (Florida & Gates, 2001;
Grimes, 2002)

Global economy has forced growth
and high demand for diversity. The
business needs are superseding
traditional career plans and policies.
(Herring, 2009)

Anti-discrimination
laws perceived to
suppress (Dicker,
1998)

Laws that protect (Vega &
Comer, 2005)

Laws that protect the organization
and the employee. Understanding
the laws reduces suppressive
employee behaviors. (Dipboye &
Colella, 2005; Fuller, Edelman, &
Matusik, 2000)

Culture exclusive of
diversity (Parkhe,
1991; Thomas, 1990)

Culture inclusive of diversity
(Barak, 2000)

Culture that is accepting and open
to providing career support for
diverse employees. (Nishii &
Mayer, 2009; Pless & Maak, 2004;
Stevens, Plaut, & Sanchez-Burks,
2008)

Singular expertise
(Brousseau, Driver,
Eneroth, & Larson,
1996)

Cross-functional development
(Brousseau, Driver, Eneroth, &
Larson, 1996)

Change from a focus on singular,
exclusive development of a few
diverse positions versus a cross-
functional development of expertise
(Arthur, 2008; Lamb & Sutherland,
2010).

Personal opinion
application of
diversity laws
(Galanter, 1966;
Tyler, 1997)

True understanding of diversity
laws
(DeSensi, 1995; Thomas & Ely,
1996)

Understanding of legal implications
of not complying with diversity
requirements. Business and moral
imperative to understand diversity
laws for organization and career
development. (Barak, 2013; Bryd &
Scott, 2014)

Implications for Employers

Organization leaders must be committed to helping their organization and its employees succeed. Global workplace expansion requires leaders to understand different cultures and the needs of employees who are of different nationalities (Friedman & Mandelbaum, 2011), but they must also understand the differences within the personal characteristics of their employees. However, they must also learn how to quickly recognize and adapt to people differences despite their willingness to perform the same tasks (Hughes, 2010). The needs of dedicated employees must be acknowledged, regardless of differences. The priority of managing workplace diversity moves from the mundane tasks of getting people to work to a forward-thinking approach of establishing unity within individuals' assigned environment, using the individuals qualifications, training and developing the employee, supporting their self-development, and recognizing the value of the employees time as they adapt to the organization culture. Organization leaders should understand the extent to which the five values are essential to productivity and/or competitive advantage of an organization (Hughes, 2010). This article is not suggesting that organization leaders choose diverse employees over others, but that they acknowledge and understand all employees and use that knowledge to enhance and improve organization performance.

Conclusion

With attention placed on the future of a sustainable workforce and skills capabilities to perform the type of work (Friedman & Mandelbaum, 2011; Reich, 2010), organizations must make rapid adjustments that force modifications in job training, skills development, human resources and talent management procedures, and location/placement of employees (Hughes, 2010). This attentiveness to people development design changes compels organizations to continue working towards defining and clarifying the term workforce diversity (Carrell, Mann, & Honeycutt-Sigler, 2006).

Some research questions to consider include:

1. In what ways can the five values most effectively be integrated into the performance evaluation systems of organizations?
2. Are the five values significant enough to the organization to warrant a change in strategy for people and technology development?
3. To what extent can organization leaders leverage their understanding of workforce inter-personnel diversity and use the five values to enhance organization and employee performance?

Researchers could also develop a typology (McKinney, 1966) for each of the five values and integrate them into the performance evaluation systems within organizations. It may provide organization leaders with a more objective measure of evaluating employee performance. Researchers and practitioners can understand and leverage career development paradigm shift to enhance career management systems that value individuals within the workplace.

The role of organization context is critical with regards to valuing diversity. Organizations are not a social vacuum. Many organizations seek a culture of mutual respect. How do you mutually respect a racist or biased individual? There must be an identity shift within organizations that reflect what is being espoused externally. This identity shift occurs by:

1. Internalizing a leadership identity that supports true diversity.
2. Developing a sense of purpose that settles for nothing less than a diverse workforce through use of the Hughes' Competitive Advantage Framework and People as Technology Model.
3. Institutionalize a population of diverse leaders (Nishii & Mayer, 2009).
4. Rely more on the individual than on the group identity. "The more you know about an individual, the less it makes sense to rely on general findings about a group of which he or she is a part" (Benko & Pelster, 2013, p. 81).

This study revealed methods by which the Hughes' Competitive Advantage Framework and People as Technology Model can assist organization leaders in understanding inter-personnel diversity of employees. It also provided six factors that can be used to develop a tool to evaluate and manage evaluators of diversity efforts. If these factors can be used effectively and recognition of career development paradigm shifts is understood, organizations can strengthen employee career management diversity efforts and subsequently its competitiveness.

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They Might as Well Be Giving this Stuff Away: A Theoretical Examination of Retail Clearance Sales

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ABSTRACT

Clearance sales provide an attractive option for retailers to eliminate inventory of older products. They bring customers into a store and move older products off the shelves, making room for in-demand products. General consensus exists: clearance sales benefit retailers. Despite the consensus on the benefits retailers accrue from clearance sales, I argue that using clearance sales to clear inventory is not the optimal strategy. Utilizing a theoretical model, I show that retailers may earn more profits by implementing a non-clearance sale strategy, giving away or donating an old product and selling a new product in its place, rather than reducing the price of older products. Retailers utilizing clearance sales should heed the advice of their customers who often exclaim, "You might as well be giving this stuff away!"

Clearance sales provide an attractive option for retailers looking to eliminate their inventory of older products. They bring customers into a store and help move older products off the shelves, making room for newer, in-demand, products. General consensus among retail managers and marketing researchers exists: clearance sales benefit retailers (Lazear, 1986; Nocke & Peitz, 2007). However, I look at clearance sales from a new perspective, asking the question, when is it better for a retailer to give an old product away and sell a new product, rather than attempting to sell the old product at a reduced price (or even a loss)? Additionally, I derive the necessary margin a retailer should earn to justify offering a new product, as opposed to marking down prices on existing ones.

Contrary to current consensus on the benefits retailers accrue from clearance sales, I argue that relying on clearance sales to clear inventory is not the optimal strategy for retailers. Instead, retailers may earn more profits by implementing a non-clearance sale strategy (e.g. by giving away or donating the old product and selling a new product in its place), rather than reducing the price of the older product.

Many retailers regularly use clearance sales as a means of replacing out of date products with newer ones. They do this under the assumption that the older product is either out of season or not going to sell at full price. Opportunistic consumers wait until retailers lower their prices at the end of a season to obtain the product (Anderson & Simester, 2003). Consumers willing to ignore fashion trends and wait until the end of season to buy a product may even be able to buy below the retailer's cost (Pashigian, 1988).

The ideal situation for a retailer would be not to need a clearance sale in order to sell out of a product. The reality, however, is that retailers face challenging decisions regarding changes in the merchandise mix. One such challenge contributing to retailers' reliance on clearance sales is determining the initial profit-maximizing price of a product, based on a consumer willingness to pay. Assuming the retailer has not over-estimated consumers' willingness to pay and demand for the product is sufficient, the product should sell out and the retailer will perform the same function over again with a new product. What should the retailer do, however, if the product does not sell in sufficient time?

While some retailers maintain prices for significant lengths of time, many use clearance sales to rid themselves of remaining items that did not sell at full price. Clearance sales are very popular among both retailers and consumers. Many consumers prefer buying the product at the end of the season (e.g. buying a winter coat in April), knowing that the retailer will markdown prices in order to clear inventory (Anderson & Simester, 2003). Retailers continue to utilize clearance sales as a preferred method to clear inventory, even though they take a loss on some products (Pashigian, 1988). Clearance sales have been analyzed and endorsed by economists, who have argued that clearance sales benefit both consumers and retailers (Lazear 1986; Nocke and Peitz 2007).

Clearance sales are believed to benefit retailers because they provide retailers with two opportunities to sell the product (at the original price and the clearance sale price) and because customer response to the original pricing provides more information to the retailer when setting the price in the second time period (Lazear 1986). Increased information makes it more likely that the retailer will be able to price the product optimally with respect to consumers' valuations of the product.

Markdowns increase the number of potential customers that visit the store, increasing the likelihood of customers purchasing multiple commodities. Epstein (1998) notes that retailers may profit from a clearance sale strategy by accompanying decreased price of one commodity with increased prices of other commodities. This strategy seems unlikely, however, as customers drawn in by a clearance sale are likely to be price sensitive, and research has shown that while sales may increase demand within one department, they harm demand elsewhere in the store (Anderson & Simester, 2003; Anderson & Simester, 1998).

Clearance sales are believed to benefit consumers by giving two pricing points at which to buy: a higher price in which the product is nearly guaranteed to be in stock, and a lower price at which the product may or may not be available (Nocke and Peitz 2007). Some consumers prefer to pay the higher price to secure the product, while others prefer to wait for a clearance sale (Anderson & Simester, 2003), risking that the good may no longer be available if other consumers had a higher valuation for the product.

While clearance sales have long been considered a dominant part of retailing strategy worldwide and a legitimate marketing tool, its use has become ubiquitous (Merrilees & Fam, 1999), and this strategy is "threatening the survival of certain retailers who rely too much on them" (Rajagopal, 2007, p. 119). Rajagopal (2005) notes that clearance sale levels of 25-50 percent have become the expectation of consumers, rather than an exceptional deal. Lowry et al. (2005) notes that

marked down goods frequently account for more than 30 percent of a retailer's sales volume. Elmaghraby et al. (2009) references statistics that 26 percent of fashion goods are sold at markdown prices (Fisher, Hammond, Obermeyer, & Raman, 1994) and that 20 percent of Best Buy's customers wait for items to be marked down (McWilliams, 2004).

The pervasive use of clearance sales comes in spite of warnings that the benefits of this strategy focus too much on the "transitory short-term advantages of prices deals, without adequate consideration of longer-term sales objectives" (Hinkle, 1965, p. 75). Research has shown that clearance sales do, in fact, have negative implications both for the product being marked down and the retailer selling the product. Given the prevalence and cyclical nature of clearance sales, consumer response to the product and retailer is particularly meaningful (Hess & Gerstner, 1987; Rajagopal, 2007).

Relying too much on sales is risky. Using too many sales signs, for example, has been shown to diminish the effectiveness of the pricing cue (Anderson & Simester, 1998) and that demand for an item on sale goes down when other items are also put on sale (Andrews & Rogelberg, 2001). Placing multiple items on sale may increase demand for those items – but it can also reduce overall demand (Anderson & Simester, 2003).

While utilizing sales too much is potentially harmful to overall demand, the reason for discounting is crucial in shaping the customer's response to the sale (Bobinski & Cox, 1996; Fry & McDougall, 1974). Customers have negative attitudes towards deals when they believe the retailer is trying to get rid of hard-to-sell inventory (Lichtenstein, Burton, & O'Hara, 1989). Customers may view discounted merchandise as old, leftover, and undesirable. Clearance sales, a way for retailers to rid themselves of hard-to-sell inventory, are often accompanied by many negative opinions toward the product and the retailer.

Lazear (1986) and Nocke and Peitz (2007) view clearance sales as beneficial for both consumers and retailers, but neither takes into account the negative implications of clearance sales described above, nor do they account for the value of shelf space. The value of shelf space allows retailers to charge slotting fees (Bloom, Gundlach, & Cannon, 2000; Desiraju, 2001). Shelf-space is a valuable commodity, and manufacturers are willing to pay slotting fees to make their product accessible to the end consumer. While Bloom et al. (2000) specifically referenced grocery stores, the idea applies to all retailing situations in which shelf space is of limited availability. Receiving payment for shelf-space provides an example of the value of shelf-space and allows retailers to exercise market power in their supply-chain relationships (Bloom et al. 2000). Every store has limited shelf space, however, and retailers must maximize revenue from that limited space. While this paper is not focused specifically on slotting allowances, it is important to note that retailers have options other than placing an item on clearance sale and taking a loss on it and that they are giving up valuable square footage when they do utilize clearance sales.

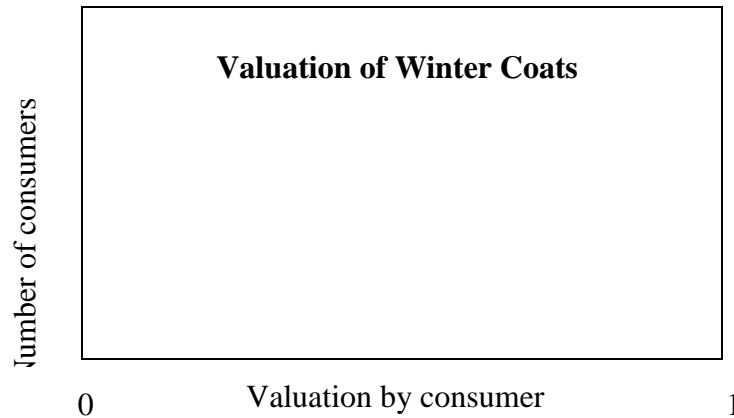
Modifying Lazear's (1986) model of clearance sales to account for the opportunity cost of selling a product via a clearance sale as opposed to gaining salvage value by taking the product off the shelf and earning a higher margin for an in-season (and in-demand) product, I determine whether clearance sales truly are the optimal pricing strategy for retailers. This paper extends the work on clearance sales by providing a model that incorporates opportunity cost and salvage value into

the retailer's decision to take a product off the shelf, as opposed to further marking down prices in attempt to sell their entire stock of the remaining product.

Clearance Sale Strategy

Suppose that a retailer sells goods over two time periods. In time period one, they have only one product on the shelf (e.g. winter coats, see Figure 1). Based on their best estimate of consumer valuation, the retailer sets a price, P_1 , at which they would like to sell the winter coats in the first time period.

Figure 1: Shelf Space Allocated at the Beginning of Time 1



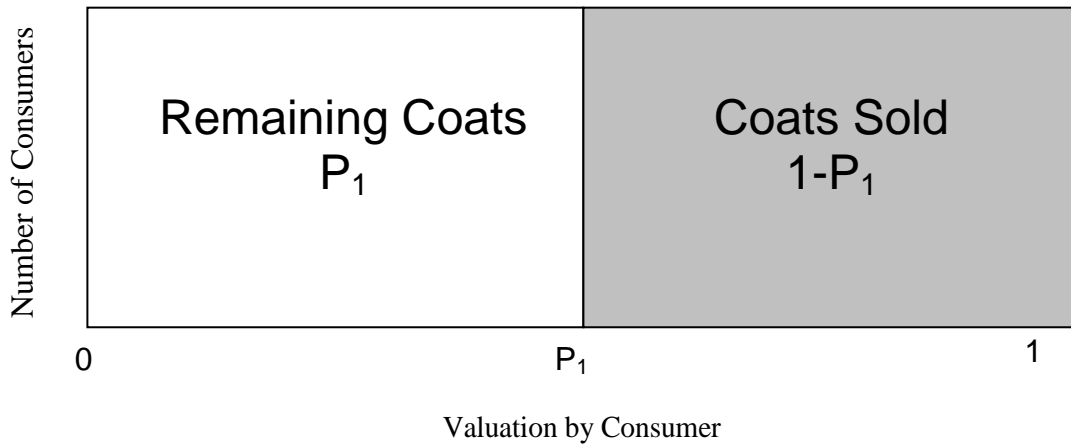
Assuming uniform distribution, consumers with a high valuation for the coat will make a purchase, and depending on the price, a proportion of the coats, $(1-P_1)$, will be sold in time period one, leaving P_1 coats on the shelf at the end of the time period (see Figure 2).

Constraining cost to be 0, the profitability of the clearance sale strategy after time one is calculated by multiplying the price per coat in time one by the number of coats sold in time one as shown in Equation 1:

$$\Pi_{c1} = P_1(1 - P_1) \tag{1}$$

In time period two, the retailer may have either one or two products on the shelf. The shelf will be stocked with any left-over winter coats, while the winter coats that were sold in time one will be replaced by $(1-P_1)$ swimsuits. In order to facilitate more sales of winter coats, the retailer lowers the price of the coats from P_1 to P_2 .

Figure 2: Winter Coats Sold in Time 1

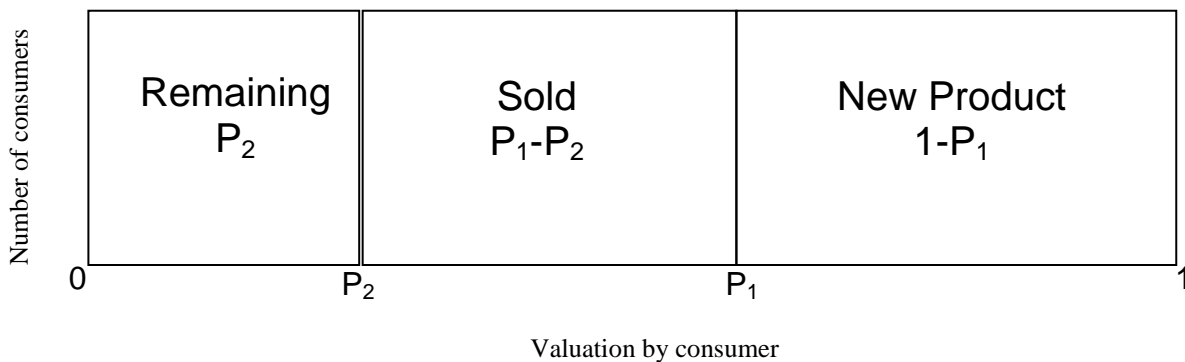


An assumption of this model is that retailers earn a constant unit margin, M_s , from selling a swimsuit, regardless of the quantity of swimsuits they are selling. Using Figure 2, it can be seen that under the clearance sale strategy, swimsuits have $(1 - P_1)$ shelf space, and the profitability of the retailer over the course of two time periods through the clearance sale strategy is obtained by adding the profit from selling coats in time two multiplied by the number of coats sold and the margin of selling swimsuits multiplied by the proportion of swimsuits sold in time two to the profits earned in time period one:

$$\Pi_{cTotal} = P_1(1 - P_1) + P_2(P_1 - P_2) + M_s(1 - P_1) \quad (2)$$

One final addition should be made in calculating the retailer's potential profits from a clearance sale strategy. Some proportion of the coats, P_2 , may be left-over at the end of the second time period (Figure 3).

Figure 3: Quantity of Goods Sold in Time 2



At this time, retailers will either sell the coat to a secondary retailer, gaining some salvage value through that medium, or, donate the left-over product to a charitable organization and receive a tax credit from the government. Thus the retailer is able to receive a salvage value, v , for the left-over winter coats ($v < M_s$; $0 < v < P_2 < P_1$). Equation (2) is modified to account for this additional profit:

$$\Pi_{CTotal} = P_1(1 - P_1) + P_2(P_1 - P_2) + M_s(1 - P_1) + vP_2 \quad (3)$$

The retailer will look to set prices in order to maximize expected profits, (3). Solving for the first order conditions of the profitability equation with respect to price at both time periods yields the optimal prices for the retailer utilizing a clearance sale strategy:

$$P_1^* = \frac{v - 2M_s + 2}{3} \quad (4)$$

$$P_2^* = \frac{2v - M_s + 1}{3} \quad (5)$$

If the salvage value (v) and margin from the new product (M_s) both equal 0, as in Lazear's 1986 work, the above equations yield optimal prices of $2/3$ and $1/3$, respectively. Under the assumption of this model that v is less than M_s , and that v and M_s are both greater than 0, P_1^* is lower than Lazear's optimal price in time one. No relationship can be determined between P_2^* of this model and Lazear's model without knowing how much larger M_s is compared to v . Substituting P_1^* and P_2^* into the profitability equation (3) yields the maximum profitability for the clearance sale strategy:

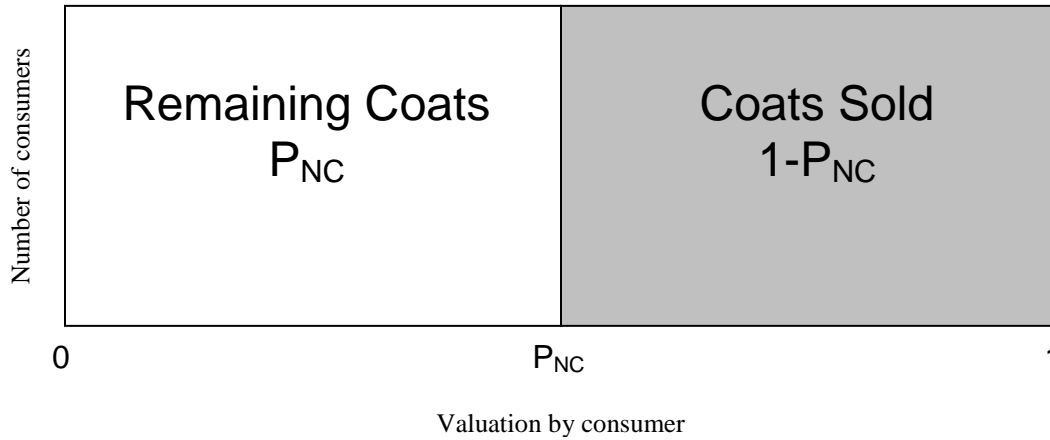
$$\Pi_c^* = \frac{v + v^2 - vM_s + M_s + M_s^2 + 1}{3} \quad (6)$$

Using Lazear's assumption that $v = M_s = 0$, this model yields the same optimal profitability from a clearance sale strategy, $1/3$. The values of v and M_s determine whether or not the profitability of having a clearance sale is higher or lower under the assumptions of this model.

Non-Clearance Sale Strategy

Under the non-clearance sale strategy, period one begins exactly the same way as the clearance sale strategy. The retailer begins the period with a shelf full of winter coats, for which they set a price, P_{NC} . As shown in Figure 4, the price set by the retailer determines what portion of the coats will be sold at that price, $(1 - P_{NC})$. In the non-clearance sale strategy, the P_{NC} remaining coats will not be sold at a lower price in the second time period. Instead, at the end of time one, the remaining coats will be sold to a secondary retailer, or donated, for some value, v , as was done after time two of the clearance sale strategy.

Figure 4: Winter Coats Sold in Time 1



The distinction between the clearance sale strategy and the non-clearance sale strategy occurs as the retailer moves into the second time period. Whereas the retailer using the clearance sale strategy tried to sell the coats that remained on the shelf after time period one, the retailer using the non-clearance sale strategy will gain the salvage value, v , after the first time period for P_{NC} coats. In period two, the retailer will have an entire shelf full of swimsuits, earning the constant margin per swimsuit, M_s , on the shelf. The profitability of the non-clearance sale strategy can then be calculated by adding the total revenue earned from selling coats in time one and the salvage value earned from the remaining coats after time one to the total revenue earned from selling swimsuits in time period two. Specifically,

$$\Pi_{NC} = P_{NC}(1 - P_{NC}) + vP_{NC} + M_s \quad (7)$$

Again, the retailer will set prices in order to maximize profits, yielding the optimal price for the non-clearance sale strategy:

$$P_{NC}^* = \frac{1 + v}{2} \quad (8)$$

Lazear derived the optimal price of the non-clearance sale strategy as $\frac{1}{2}$, but he did not account for salvage value in his model. Accounting for the salvage value that comes from the remaining coats, retailers should set higher prices than Lazear posited in his 1986 work. When the optimal price is substituted into the profitability equation, the optimal profitability for a non-clearance sale strategy is:

$$\Pi_{NC}^* = \frac{v^2 + 2v + 1}{4} + M_s \quad (9)$$

Even if the retailer receives no salvage value from the remaining coats after time one, replacing the product with a product (swimsuit) earning higher margins in the second time period makes

the profitability of a non-clearance sale strategy greater than $\frac{1}{4}$ as was proposed by Lazear (1986).

Comparing the Two Strategies:

The Optimality of the Non-Clearance Sale Strategy

Lazear found that the clearance sale strategy offered greater potential profits than the non-clearance sale strategy, a finding which supports the actions of many retailers who use clearance sales to move products off the shelf at the end of a season, or after some amount of time has passed. But does the clearance sale strategy truly offer the retailer the most profits if salvage value and opportunity cost are taken into account? Is the profitability from a non-clearance sale strategy ever the more profitable option? Under what conditions is $\Pi_C^* \leq \Pi_{NC}^*$? Using equations (6) and (9) yields the conditions under which a retailer would earn more profits by accepting some salvage value for the remaining coats after period one and not having a clearance sale:

$$\frac{v + v^2 - vM_s + M_s + M_s^2 + 1}{3} \leq \frac{v^2 + 2v + 1}{4} + M_s \quad (10)$$

This is equivalent to:

$$(v - 1)^2 + 4(M_s - 1)^2 - 4M_s v \leq 4 \quad (11)$$

Graphing inequality (11) shows the interpretation of the equation and that retailers would be more profitable by following a non-clearance sale strategy in many situations (see Figure 5).

Figure 5: Optimality of a Non-Clearance Sales Strategy

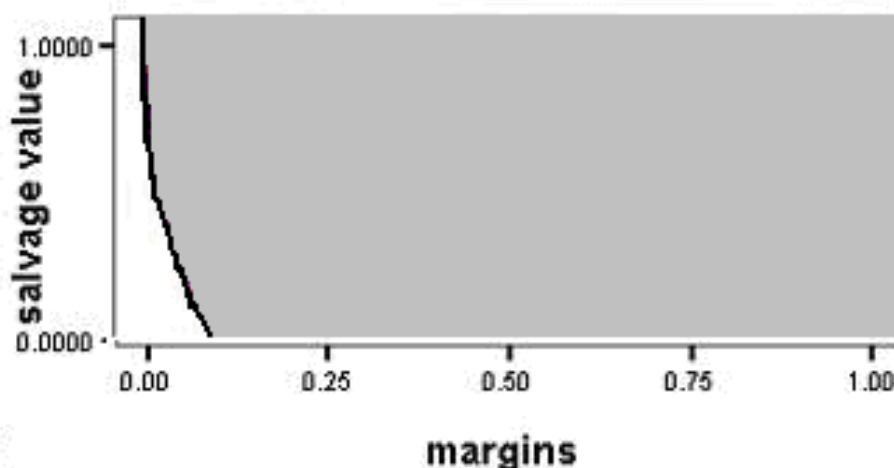


Figure 5 shows that retailers are frequently better off implementing the non-clearance sale strategy than the clearance sale strategy, as the shaded area represents the points at which a retailer will be more profitable using a non-clearance sale strategy.

Setting the salvage value, v , equal to 0 in inequality (11) for M_S yields the margin the retailer needs to earn in order to be indifferent to having a clearance sale for the remaining coats after the first time period or receiving the salvage value from those coats and placing a new product earning that margin on the shelf. A margin of 13.40% is required for the retailer to be indifferent to the strategy used to clear the shelves of the winter coats that remain unsold from time period one. If a retailer may earn a margin of 13.40% or higher, they should not have a clearance sale and they do not need to consider the salvage value they would receive for the leftover coats when deciding whether or not to have a clearance sale.

Comparing the two strategies (and accounting for opportunity cost and salvage value) shows that a clearance sale is often not the most profitable strategy for retailers to implement. Retailers would make a greater profit even if they were to donate left-over products (as opposed to cutting their prices in half), regardless of the salvage value they may accrue from government tax benefits, so long as the margin on the replacement product is at least 13.40%. In most cases, the government would provide the retailer with some compensation for their donation, or the retailer could salvage some value from the product by selling it to a secondary retailer.

Discussion and Conclusion

It is estimated that retailers are losing more than \$200 billion per year due to markdowns (Erickson, 2012). JC Penny has recently changed its pricing strategy to one set “fair and square price” that will fall only in a clearance sale (Edwards, 2012). Using Lazear (1986) as a foundation, I extend the model of clearance sales to show that in some situations, a retailer would actually be better off giving a product away rather than selling it at a severely discounted price, often less than the cost they paid for it. When someone mentions to a friend a great special they took advantage of, they may say, “They might as well have been giving those away.” It turns out, that person may just be right.

I have shown that Lazear’s assertion that both consumers and retailers benefit from clearance sales is not necessarily true when accounting for (1) the opportunity cost of keeping a less profitable item on the shelf rather than replacing it and (2) the salvage value the retailer could receive for donating the left-over product or selling it to a secondary retailer. The retail manager faced with the decision of marking-down a product for clearance, or throwing it out, should rethink the normal strategy of mark-down pricing and consider what product could be on the shelf instead. If that replacement product earns a margin of at least 13.40%, or if the retailer would earn some margin from the new product and a salvage value from selling/donating the old product, they may be able to earn more profits without marking down prices. Managers should be willing to accept the inability to sell the good to a consumer as a sunk cost and move on to displaying a more profitable product, salvaging whatever value they can from the original product.

Another positive result of donating left-over inventory, rather than further marking down prices, is that managers may benefit from the word-of-mouth and positive brand image that goes along with being a socially responsible corporate entity. This model did not account for the good will that may accrue from being socially responsible, but given the choice, consumers often want to be associated, and prefer to do business, with such companies (Sullivan, 2008).

When a customer suggests that retailers might as well be giving the goods on clearance sale away, it would be wise of management to take that suggestion under consideration. In many cases, they may find it more profitable to do just that.

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APPENDIX

1. *Derivation of optimal pricing in a clearance sale strategy.* Taking the first derivative of the profitability equation for a clearance sale strategy (3) with respect to P_1 and P_2 we get:

$$\frac{d\Pi_c}{dP_1} = 1 - 2P_1 + P_2 - M_s, \text{ and}$$

$$\frac{d\Pi_c}{dP_2} = P_1 - 2P_2 + v$$

After verifying the second order conditions, setting both derivatives equal to zero and solving for P_1 and P_2 simultaneously yields the optimal prices for each:

$$P_1^* = \frac{v - 2M_s + 2}{3}$$

$$P_2^* = \frac{2v - M_s + 1}{3}$$

2. *Derivation of optimal pricing in a non-clearance sale strategy.* Taking the first derivative of the profitability equation for a non-clearance sale strategy (7) with respect to P_{NC} , we get:

$$\frac{d\Pi_{NC}}{dP_{NC}} = 1 - 2P_{NC} + V$$

After verifying the second order condition, setting the derivative equal to zero and solving for P_{NC} yields the optimal price for the non-clearance sale strategy:

$$P_{NC}^* = \frac{v^2 + 2v + 1}{4} + M_s$$

3. *Deriving the margin at which it is always better to follow a non-clearance sale strategy as opposed to a clearance sale strategy.* Allowing v to equal 0 in equation 11, yields the margin at which, as Figure 4 shows, it is always better for the retailer not to use a clearance sale.

$$(0 - 1)^2 + 4(M_s - 1)^2 - 4M_s \leq 4$$

Solving the quadratic equation yields two solutions, $M_s = 0.1339, 1.866$. An assumption of this model is that a retailer cannot earn a margin greater than 1, so with a replacement product that earns a margin of 13.40% or higher, the retailer would be more profitable by implementing the non-clearance sale strategy.

Machiavellianism in Business Management and Corporations

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ABSTRACT

The intent of this paper is to analyze Machiavellianism and the effect it has on business management and corporations. Origins, problems, and proposed solutions will be explored.

Introduction

Machiavellianism is a personality characteristic that evolves over time through the process of socialization and life experiences and while Machiavellian behavior can potentially be destructive it can also be channeled in a positive direction. Corporations both attract and seek Machiavellians and they always will because, in short, Machiavellians know how to get things done. However, the fact that corporations employ Machiavellians does not have to spell the downfall of the corporation.

Machiavellianism Defined

Machiavellianism lacks a single concise definition and is instead characterized by several descriptors that serve to define the term. Machiavellians are pragmatic, maintain emotional distance, believe that the ends justifies the means, are more likely to be manipulative, win more, are persuaded less, persuade others more, and are more likely to act unethically in ambiguous situations where the outcome is important to them. (Robbins 2004). Machiavellians judge ambiguous actions more leniently and are more likely to form intentions to behave unethically. (Bass et al. 1999). In turn, Machiavellianism is positively associated with ethical judgments that questionable actions and behavioral intentions to perform questionable actions are acceptable. (Bass et al. 1999). A need for power and a desire to control and manipulate people, is equated with Machiavellianism. It is deemed acceptable to treat people as a means toward an end. (Lewin et al. 1994). Machiavellianism is characterized by shrewdness rather than by interest in an individual's welfare. (Calhoon 1969).

Generally, an ideal Machiavellian is cool, detached, logically oriented, likely to disregard the affective states of both himself and others, is prone to establish structure in loosely structured situations, and advocates the use of guile and deceit in interpersonal relationships, and holds an unflattering view of human nature. (Durand et al. 1976). A Machiavellian is prepared to take any action that might be required to achieve his goals and while not necessarily unethical by nature, a Machiavellian is unconcerned with how ethical or unethical a course of action is, being primarily concerned with whether the course of action will lead to the desired end. (Bass et al. 1999). Although there is a strong linkage between Machiavellianism and unethical behavior (Bass et al. 1999), Machiavellian individuals should not be viewed as consistently untruthful or consistently unethical but rather as individuals who are willing to sacrifice ethics, if necessary, to attain their objectives. (Gable et al. 1994). Machiavellian individuals, while not totally lacking morals, may operate under a set of ethical guidelines that are inconsistent with conventional morality. (Bass et al. 1999). Machiavellians are relatively unconcerned with judging the morality of ethically ambiguous actions and are more likely to behave in ways (ethical or unethical) that would lead to desired ends. (Bass et al. 1999).

Additionally, a Machiavellian is not exclusively concerned with personal self-interest. That is to say that a Machiavellian may exhibit Machiavellian characteristics in working to achieve the goals of a business, organization, or even a community. A Machiavellian's desired ends could be motivated by self-interest or the well-being of a community or nation. (Bass et al. 1999). A Machiavellian is one who employs aggressive, manipulative, exploitive, and devious moves in order to achieve personal or organizational objectives. (Gable et al. 1992). Having an understanding of what Machiavellianism is, provides a foundation from which to examine how such a complex persona may be formed.

Higher Education as a Factor in Machiavellian Socialization

Machiavellianism is acquired via one's environment. If we look at Machiavellian characteristics as starting to develop in the individual during early childhood we see that Machiavellianism is not inborn, but as a personality characteristic is the product of socialization and life experiences, with personality being a major factor in predicting behavior. (Durand et al. 1976).

Most managers were students before they were managers, so it is necessary to examine the role that higher education plays in socializing future managers to be Machiavellian. Interestingly, Siegel found that academicians were the most Machiavellian, M.B.A. students more Machiavellian than the norm, and practicing managers the least Machiavellian of the group. (Siegel 1973). Siegel's work showed that M.B.A. students are more authoritarian, less democratic, and less participative than practicing managers. (Siegel 1973). This is a very interesting finding because it would seem plausible that M.B.A. students, who either have not yet started their careers or are just beginning their careers, would be more idealistic and the least Machiavellian of all; however, it appears that to some extent higher education has a tendency to socialize M.B.A. students to be Machiavellian.

Siegel offered the explanation that M.B.A. students and academics are responding to a stereotype of the managerial role. (Siegel 1973). An example of this stereotype response was a finding that

practicing managers were more people centered; however, M.B.A. students perceived managers as being self-centered and many M.B.A. students surveyed were found to be self-centered themselves. (Siegel 1973). This represents the stereotype response found amongst students and even faculty members. M.B.A. students perceive managers as being Machiavellian so they themselves develop Machiavellian attitudes and characteristics.

This result would seem plausible since many M.B.A. students and faculty members do not possess any real-world business experience. As the attitudes of M.B.A. students are closely related to the attitudes of the faculty members instructing them it seems plausible that faculty members, by emphasizing only knowledge, skills, and techniques, may at the same time be de-emphasizing faith and trust and through socialization imparting values to M.B.A. students that are far removed from those held by practicing managers. (Siegel 1973).

Additionally, academia would seem the perfect training ground for imparting Machiavellian attitudes, because academia is filled with very ambitious students and at the same time academia, in many instances, is ripe with ignorance about the real world of business. This represents the perfect environment for responding to stereotypes as opposed to reality. While socialization and the development of personality characteristics and attitudes begin to take place at a very young age, the time that an individual spends in academia may serve to develop or re-enforce Machiavellian behavior. As will be shown, holding Machiavellian values impacts the type of environment that one is attracted to.

Machiavellian Attraction

A Machiavellian individual seeks employment in an organizational environment conducive to the expression of Machiavellian values. For an individual to be an effective manager in an organization a match must exist between the individual and the organizational environment. (Shackleton et al. 1990). Organizational characteristics conducive to the expression of Machiavellian behavior include the opportunity for improvisation, in the sense that rewards or outcomes are not tied to objectively defined performance, but can be influenced by the manner in which the situation is handled, opportunity for face-to-face interaction, and potential for emotional arousal. (Gemmill et al. 1972.)

Organizations which are the most conducive to Machiavellian expression are those that are loosely structured, because they permit the individual to improvise and exercise judgment to a great extent. (Gable et al. 1992). When the environment is loosely structured Machiavellian managers will often obtain higher job performance ratings than equally situated managers who are not Machiavellian. (Gable et al. 1992). In tightly structured situations the roles of the participants are clear, the way in which goals are achieved is specific, the reward associated with each goal is defined, and there is little latitude for improvisation; however, loosely structured situations are characterized by ambiguity as to the role of the participants, the means to achieve goals, and their associated rewards. (Gable et al. 1992). An ideal example of the role that organizational structure plays in attracting Machiavellian individuals is that of being a politician versus being a civil servant.

Elected government officials are often Machiavellian and, typically, the offices that these individuals hold are very loosely structured and provide for a great deal of improvisation. In contrast, civil servants in bureaucratic organizations, such as federal agencies, tend not to be Machiavellian because the environment they work in is highly structured with many rules and procedures governing every action and decision they make. Machiavellians do not like red tape or internal controls and procedures; the more ambiguous the situation the better. In a highly bureaucratic structure Machiavellian managers feel more frustrated because they have little opportunity to personally influence or manipulate organizational superiors to achieve desired outcomes. (Gemmill et al. 1972). Possessed of an understanding of the environment that Machiavellians are attracted to, it is necessary to explore why corporations are Machiavellian magnets.

Corporations as Machiavellian Magnets

In today's corporate environment ethical considerations are of paramount concern, especially with the advent of debacles and scandals such as Enron. It is clear that managerial ethics are important in today's business environment and so is a basic level of trust, which cannot exist without ethics. Without some minimal level of trust between people no form of corporate activity is possible. (Willmer 1977). Some level of ethics and trust is important, especially in the public company setting, because without these elements corporations have difficulty functioning, shareholders and the public in general lose confidence in public companies, and such companies are more prone to violations of law. The need for trust between groups and between individuals within groups is very important as well, because where trust is missing, suspicions are not slow to grow and the main corporate objective becomes lost. (Willmer 1977).

Furthermore, Machiavellianism is economically destructive because it leads to a system that rewards deception, falsity, and misrepresentation which inevitably leads to crime by stealth. (Orr 1974). One would think that corporations concerned with ethics would not attract managers with Machiavellian characteristics; however, as shall be noted, such corporations not only attract, but seek managers with Machiavellian characteristics.

Attitudes of managers are a critical contingency in organizational design and strategy, because the micro-level characteristics of the manager may be enacted in macro-level features of the organization. (Lewin et al. 1994). If we assume that corporations seek to have an ethical organization composed of ethical individuals, for reasons of economics, efficiency, functionality, and law, then it is necessary that these same corporations attract, retain, and promote ethical individuals; however, herein lies the great problem. While corporations seek to conduct their affairs in an ethical manner it is generally true that corporations seek to attract individuals with at least some Machiavellian personality characteristics and that those possessing some Machiavellian personality characteristics typically rise to the top of the corporation. Corporations attract such individuals as managers because the corporation itself is motivated by self-interest, the profit motive, and Machiavellians can be beneficial in achieving the corporation's profit objective, because Machiavellian self-interest and measures of personal success have a strong economic component (D'Andrade 1993), with a Machiavellian often measuring long term success in economic terms, as does a corporation. The problem that corporations face lies in attracting managers that are Machiavellian enough to drive the

corporation, but not so Machiavellian that they drive the corporation into the ground. A corporation needs an internal structure that will prevent the disruption and decay that can come when Machiavellianism is left unchecked and in this way realize the benefits Machiavellians can bring without the attendant costs.

It's fairly easy to see why many corporations are filled with managers who possess at least some Machiavellian characteristics. Machiavellians tend to be more frequently identified and selected as leaders, preferred as partners, and evaluated as being more persuasive (Gemmill et al. 1972), with Machiavellianism correlating strongly with organizational success, especially in discretionary fields such as management. (Langevoort 2002). Additionally, organizational profitability is positively related to Machiavellian management characteristics. (Gable et al. 1992).

Managers who adopt manipulative behavior patterns typically are more effective than those who are not as adept in developing these behavior patterns (Gable et al. 1994), with manipulation meaning the capacity of an individual to modify the behavior of others in a manner which he desires and at the same time resist modifying his own behavior in a manner which he does not desire. (Calhoun 1969). Machiavellians are more effective in manipulating and persuading others. (Gemmill et al. 1972). Survivors in highly competitive organizations, such as corporations, are those who exhibit Machiavellian characteristics (Langevoort 2002), with success in highly competitive business organizations being skewed in the direction of rewarding those who are highly focused at the business of competing, which of necessity means the cognitive ability to block out concerns – like difficult ethical problems – that are likely to be distracting. (Langevoort 2002). Only those with an inexhaustible capacity for self-rationalization, fueled by boundless ambition, can escape the discomfort such compromises produce. (Langevoort 2002).

Machiavellians also possess other characteristics that corporations find attractive. Individuals rating high on economic value orientation, extroversion, Machiavellianism, and who possess an internal locus of control are significantly less ethical. (Sims, Jr. et al. 1977). Yet these are the very same characteristics that corporations often seek in employees. It is necessary for the very survival of the corporation, an entity organized to produce a profit, that managers and executives have an economic value orientation, as Machiavellians typically do. Corporations also seek extroverted managers, because they typically have superior interpersonal and communication skills. Additionally, corporations want Machiavellians because they are typically better in negotiation and other areas where persuasion is required and are typically high performers. Yet, those who value economic goals highly and those who are comfortable with Machiavellian principles are more prone to behave unethically. (Sims, Jr. et al. 1977).

As we have seen corporations often seek to maintain ethical organizations and have ethical managers, but because of the very nature of a corporation, it tends to seek and attract individuals unconcerned with ethics. The question is how a corporation can maintain ethics, attract ethical managers, and at the same time realize the benefits, without realizing the detriments, that can come from managers possessing Machiavellian characteristics.

The Solution to Corporate Machiavellian Magnetism

Employers must decide whether “the ends justify the means” philosophy is appropriate for their organization. (Gable et al. 1992). Unethical behavior is a combination of personality, cultural and value orientation, contingent rewards, and organizational policies. (Sims, Jr. et al 1977). Therefore, it is necessary that a corporation wishing to maintain ethics target these areas of concern. If corporations wish to attract managers with Machiavellian characteristics because of the beneficial impact that they are capable of having on organizations then it is necessary that the corporation keep these Machiavellian managers in check, so that the ethics policies and goals of the corporation are not thwarted.

An important factor to consider in checking Machiavellianism is the corporation’s climate. A corporation’s climate is important to decision-making by managers, because corporate goals, whether more or less ethical, will have a profound influence upon the kinds of individuals organizations will attract, select, retain, and subsequently, the nature of the practices and procedures that will emerge. (Dallas 2003). Ethical climates will attract more ethical persons and in this way perpetuate the ethical climate of the corporation. (Dallas 2003). Without organizational policies encouraging ethical behavior the perception of workers may be that anything goes as long as the organization’s profit objective is achieved. (Dallas 2003).

Furthermore, ethical climates have an important impact on an employee’s perception of the nature of their relationship with the corporation that may affect employee conduct. (Dallas 2003). It is very possible that a Machiavellian could thrive in an ethical environment because a Machiavellian is not compelled by nature to act unethically. If corporations adhere to well defined ethical guidelines the corporation will still attract talented Machiavellians capable of driving the organization, but the Machiavellians will have a set of rules to play by, saving the corporation from potentially damaging Machiavellian behavior. The key is to remove some degree of ambiguity from an organization’s policies, yet at the same time not create a very rigid and prescribed organizational environment.

Corporate leaders set the moral tone for their corporation; the motivation of top management in adopting ethical guidelines is reflected in work practices. (Dallas 2003). Executives and boards of directors must equate ethics with the corporation’s profitability. (Dallas 2003). Therefore, it is necessary that corporate boards of directors set the corporate climate. Factors relevant to ethical corporate climates include a code of ethics, a formal employee reporting mechanism for reporting ethical violations (whistle-blower provisions), and a reward system that reinforces ethical behavior. (Dallas 2003). A corporation’s board of directors should design and implement an ethics policy, because an organizations ethics policy significantly reduces unethical decision behavior. (Sims, Jr. et al. 1977). Incidentally, employee reporting mechanisms or whistle-blower provisions are now a legislated part of every public company’s policies as a result of the Sarbanes-Oxley Act of 2002.

It is also necessary that corporation’s adopt an information system that is not conducive to Machiavellian behavior. Machiavellians prefer a top down information processing and decision making structure. (Lewin et al. 1994). Information is power, and managers that hold the information in an organization are often more powerful, or at least perceived as being more

powerful, than a similarly situated manager who lacks information. It is therefore necessary that corporations establish an efficient information system that effectively disseminates information to all managers in order to curb the power of Machiavellian-oriented managers. (Willmer 1977).

Many more anti-Machiavellian initiatives can be found in the Sarbanes-Oxley Act of 2002. It is impossible for any legislative body to legislate ethics on to corporations or individuals; however, it would appear that while the Sarbanes-Oxley Act of 2002 cannot change ethics, it can strongly curb Machiavellian behavior in public companies which should serve to improve the ethical climate of all public companies. Monitoring of ethical compliance is an important factor in establishing and maintaining an ethical climate (Dallas 2003), and Sarbanes-Oxley provides for such ethical monitoring. Additionally, Machiavellians thrive in loosely structured organizations and typically are motivated in economic terms. Sarbanes-Oxley provides for much greater internal control which serves to make the corporate system more structured, thereby decreasing the likelihood that a Machiavellian will be capable of manipulating the corporate system in order to enhance profitability or power. Sarbanes-Oxley is not ethics legislation, but may be more aptly called the Anti-Machiavellianism Act of 2002, because it serves to directly thwart and curb the negativity and damage that can result in highly Machiavellian environments. Yet, it still provides enough latitude for Machiavellians to exercise their talents and drive the corporation in a positive direction.

Conclusion

A corporation with adequate Machiavellian safeguards can utilize Machiavellians to their full potential, channeling their talents in a positive direction, without the attendant damage that so often accompanies unchecked Machiavellianism. Machiavellians don't mind playing by the ethical guidelines established by corporations so long as they know that everyone else is playing by those same guidelines and is not gaining an advantage. Corporate America is changing and both corporations and Machiavellian managers must evolve in order to achieve their objectives while still maintaining some basic level of ethics and trust.

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Machine Learning for Predicting the Procurement of an Independent Audit at Small Private Commercial Banks: Is the Decision to Procure an Audit Systematic?

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ABSTRACT

In our study, we examine whether the decision to procure an audit is systematic or not random. First, we model and predict the decision to procure a voluntary audit using classification learning algorithms. We find, in particular, that the SimpleLogistic and Support Vector Machine learning algorithms have the highest cross-validated prediction accuracy of 67.74% and 67.68% respectively, thus supporting the claim that the decision to procure an audit is not made arbitrarily, but rather systematically, and therefore is amenable to analysis. Second, we use logistic regression to identify those characteristics that may systematically influence the decision to procure an independent audit. Generally, we find that bank size, complexity of operations, and type of ownership or organizational structure may systematically influence the decision to procure an independent audit.

Keywords: Audit Demand, Machine Learning, Classification Problem, Commercial Banks

I. Introduction

In the accounting and auditing literature, the vast majority of research concentrates on publicly listed companies. This is attributed to the lack of private company data availability. Unlike public companies, private companies are not mandated to have an independent audit absent industry-specific regulatory requirements. Therefore, a population of private companies may consist of audited and unaudited companies. This attribute enables researchers to examine the characteristics of audited and unaudited companies. Absent regulatory requirements, a private company's voluntary decision to procure an audit can be due to various reasons such as agency factors, to seek financial advisory, debt requirements, and/or covenant requirements.

Private commercial banks (also referred to subsequently as banks) are regulated by the Federal Deposit Insurance Corporation (FDIC). The FDIC does not mandate an independent audit for banks with under \$500 million in total assets¹². However, there still appears to be a perceived

¹ FDI Act 12 C.F.R. Part 36

² ³ Exceptions: 1) Thrifts, regardless of size, with a composite safety and soundness CAMELS rating of 3,4,5; 2) Holding companies which control insured financial institution subsidiary(ies) with aggregate consolidated assets of

value of an independent audit by smaller banks absent regulatory requirements. A non-mandate could be rational by the potential cost burden that an independent audit can have on smaller banks. Another potential interpretation of only requiring independent audits of banks with above \$500 million in total assets is that larger banks may pose a larger systematic risk to the financial system. Hence, the incentive is greater for more accurate reporting and monitoring of larger banks. This is exhibited by the recent financial crisis where the government only bailed out larger banks under the notion that they were too big to fail.

In this study, we use machine learning classification learning algorithms to model and predict whether small private commercial banks will likely procure an independent audit. Prior accounting and auditing literature has looked at the use of machine learning algorithms to predict the likelihood that a company is a going concern, going bankrupt, or committing fraud. We find that some machine learning algorithms are able to predict with reasonable accuracy (better than a coin toss) whether a bank is likely to be audited or unaudited. The SimpleLogistic (67.74%) and SMO (67.68%) learning algorithms had the highest prediction accuracy amongst the six algorithms used. These accuracy rates suggest that the decision to procure or not to procure an audit may be systematic at these private banks and hence worth analyzing further. Following, using logistic regression, we denote characteristics that may systematically influence the decision to procure an independent audit. Our findings suggest that bank size, complexity of operations, and type of ownership or organizational structure are positively associated with and may systematically influence the decision to procure an independent audit.

The remainder of the paper is organized as follows. In the next section, we provide the literature review on audit demand and the use of data mining and machine learning in accounting and auditing. Section 3 presents our data and descriptive statistics. In Section 4, we describe our experiment and results. Lastly, section 5 elaborates on limitations and concludes the paper.

II. Prior Research

Demand for Independent Audit

Absent regulatory requirements, the demand for an independent audit can result from the need for a monitoring mechanism, quality financial information, capital, and insurance against reliance damages by stakeholders (Wallace 1980). In agency theory (Watts and Zimmerman 1983; Jensen and Meckling 1976; Flint 1988), the principal has an inherent interest to procure an independent audit to reduce opportunistic behavior and reporting by the agent. An audit can reduce agent bias in reporting and improve the quality of financial reporting information (Kinney Jr and Martin 1994). Furthermore, an independent audit reduces the level of information uncertainty by having a third party attest to the company's business transactions and accounting estimates. The objective of an independent audit is to express an opinion on whether the financial statements are free from material misstatements (AU Section 110). A misstatement is material if it can change or influence the judgment of a reasonable person (AU Section 312). If a

\$500 million or more; 3) Any other entity for which the OTS determines an audit is required for safety and soundness reasons; (OTS Audit Rule 12 CFR 562.4) and 4) Small banks part of a public holding company.

material misstatement is found subsequently in the audited financial statement then the auditor may be liable to stakeholders for reliance damages.

Regulatory audit requirements are applicable to publicly listed companies and private companies in highly regulated industries such as banking and utilities. However, a financial statement audit is generally not required for private companies. A mandatory regulatory audit requirement for all types of companies can be an excessive financial cost burden (Keasey et al. 1988). Therefore, the voluntary decision to procure an audit by company should be based on cost-benefit measures or economic rationality (Collis 2010). However, there is substantial evidence that an independent audit has value and benefits absent regulatory requirements. (Collis 2010; Collis et al. 2004; Seow 2001; Rennie et al. 2003) find small private companies who are exempt from regulatory requirements still opted to have an independent audit. Furthermore, (Kinney Jr and Martin 1994) finds lower financial reporting quality from unaudited companies because they have a tendency to exhibit inflated earnings and assets when compared with audited companies. Beyond the benefits of higher quality financial information, procuring an audit can signal to external parties that the company is of higher quality compared with unaudited companies (Wallace 1980). This signal to external parties is particularly advantageous when a company is interested in obtaining capital or debt financing.

The literature cites size, operational complexity, company and ownership structure, and financing requirements as key characteristics that may influence a company's decision to procure a voluntary audit. As a company grows in size it becomes more difficult for owners and managers to be observant of all facets of operations. Hence, (Tauringana and Clarke 2000; Chow 1982; Abdel-Khalik 1993) find that as the company size increases the likelihood of procuring an audit increases. Furthermore, the size of a company can also be influenced by the hierarchical structure of a company (Abdel-Khalik 1993) and managerial ownership (Tauringana and Clarke 2000). The hierarchical structure of a company can make owner managers lose control of the company even though they are actively involved in the daily operations. Therefore, the loss of control by owners may increase the probability of voluntarily engaging in an audit. The complexity of a company operations can also affect the decision to procure an audit (Kohlbeck 2005). External auditors generally have experience auditing peer companies and can share that financial reporting knowledge with other clients. Another reason to voluntarily procure an audit is the requirement by lenders to have audited financial statements (Chow 1982; Carey et al. 2000). Audited financial statements are more reliable and thus may reduce the cost of capital from lenders. (Minnis 2011; Lo 2010; Blackwell et al. 1998) find audited companies had a lower cost of capital compared with unaudited companies. However, in (Kohlbeck 2005), they find audited banks may not enjoy lower cost of capital.

Data Mining/Machine Learning in Accounting & Auditing

The decision to procure an audit in the private commercial bank setting has been examined by (Kohlbeck 2005). However, we take a different analysis perspective and use some different variables or proxies to improve predictability and the results in our study. To the best of our knowledge, there is no extant literature on the combination of use of company characteristics and machine learning classification algorithms to predict whether a private company is audited or

unaudited. However, in the accounting and auditing literature, data mining and machine learning techniques are often used to predict or forecast bankruptcy, going concern, and fraud. In this section, we provide an overview of the specific techniques used in the literature.

Bankruptcy is the inability for a company to pay back its debt obligations and commitments to creditors. In the US Bankruptcy Code, a company can reorganize under Chapter 11 where the company is considered a going concern or the company can liquidate under Chapter 73. The literature has discussed numerous statistical, data mining, and machine learning techniques for predicting or forecasting the bankruptcy of companies. Some examples of these techniques range from uni-variate analysis (Beaver 1966), multiple discriminant analysis (Altman 1968), logit (Ohlson 1980) and probit (Ohlson 1980; Zmijewski 1984) models, neural networks (Zhang et al. 1999; Tam and Kiang 1992; Odom and Sharda 1990), rough set theory (McKee 1998), discrete hazard models (Shumway 2001), instance based learners (Park and Han 2002), Bayesian models (Sarkar and Sriram 2001; Sun and Shenoy 2007; Aghaie and Saeedi 2009), rule learners (Thomaidis et al. 1999), decision trees algorithms (McKee and Greenstein 2000), genetic programming (McKee and Lensberg 2002), and support vector machines (Shin et al. 2005). In practice, the most commonly used technique is the discriminant analysis model called the ZETA credit risk model (Altman et al. 1977).

A going concern opinion should be issued by the auditor prior to the auditee filing for bankruptcy. However, in today's fast paced business environment this may not occur due to the annual nature of audits. If the auditor has substantial doubt about a company's ability to continue as a going concern, then the auditor expresses this opinion in an explanatory paragraph on the audit report. A company is assumed a going concern if it is likely unable to continue meeting its future obligations as they become due (AU Section 341). The statistical, data mining, and machine learning techniques used for predicting companies that are a going concern have been limited to a hand full. These techniques include logistic (Bell and Tabor 1991; Menon and Schwartz 1987; Mutchler 1985; Chen and Church 1992) and probit regression (Dopuch et al. 1987), matched sampling (Martens et al. 2008), and multiple discriminant analysis (Mutchler 1985; Levitan and Knoblett 1985). However, by far, the most popular going concern prediction technique used is logistic regression (Martens et al. 2008).

Management fraud is an intentional act to cause a material misstatement on the financial statements (AU Section 316). Fraud is more difficult to detect because management has no intention of leaving an obvious trail and there are often few examples of fraud to study (Kirkos et al. 2007). The literature uses statistical, data mining, and machine learning techniques such as regression analysis (Abbott et al. 2000), logistic regression (Bell and Carcello 2000; Spathis et al. 2002; Beasley 1996), cascaded logit model (Summers and Sweeney 1998), generalized qualitative response model (Hansen et al. 1996), neural networks (Fanning and Cogger 1998; Green and Choi 1997; Kirkos et al. 2007), decision trees (Kirkos et al. 2007), bayesian belief networks (Kirkos et al. 2007), clustering (Thiprungsri 2011), and rule based models (Kim et al. 2011) to tease out management fraud. Researchers and practitioners have been moving in the direction of using these techniques to continuously audit and monitor transactions within a company to detect fraud (Chan and Vasarhelyi 2011; Kim et al. 2011; Thiprungsri 2011).

III. Data and Descriptive Statistics

Data

The data used in this study is from the FDIC's Report of Condition and Income (Call Report). US commercial banks are required to submit a Call Report to the FDIC on a quarterly basis. The financial reporting requirements imposed by the FDIC for commercial banks are similar to those required by the Securities and Exchange Commission (SEC) for public companies. Furthermore, the Call Reports are based on Generally Accepted Accounting Principles (GAAP) rather than on statutory accounting principles (Beatty and Harris 1999) and are examined on a regular basis by regulators (Gunther and Moore 2003). Unlike prior archival studies which dealt with public companies, there is an intrinsic value of analyzing the effect of an independent audit in the private commercial bank setting. Since small private commercial banks with less than \$500 million in total assets are not mandated to have an annual independent audit but can do so at their discretion, the population of small private commercial banks consists of both audited and unaudited banks. The data used spans from December 2001 to December 2012 (12 Years). There are 4,300 unique active commercial banks and 34,397 bank years in the study.

The study uses the following variables: log of total assets (LTA) to proxy for size, non-interest income over total interest income (NIITI) and off balance sheet activities (OFF) to proxy for operational complexity, and a dummy variable indicating whether a bank is part of a multi-bank holding company as a proxy for ownership or organizational structure (MBHC). Based on prior literature, these variables may be associated with the decision to procure an independent audit. First, we expect bank ownership or upper management to be more removed from the numerous day to day activities of larger banks and they would like assurance that their business decision making is based on material accurate financial reporting. Second, a bank is traditionally involved in business activities that involve generating interest income (ex. mortgages, consumer and business loans, credit cards, etc...). Therefore, we would expect that operational complexity increases for those banks that have greater non-interest income and off-balance sheet activities. Lastly, we expect that bank ownership and upper management of multi-bank holding company will want to have verification of their subsidiaries financial reporting.

IV. Experiment and Results Analysis

Due to the inherent difficulties of directly interpreting output results from classification learning algorithms, we took a two stage approach to analyzing the data. In the first stage, we analyze the performance of six learning algorithms in modeling and predicting the likelihood of a bank to procure an audit. In the second stage, we then denote characteristics that may influence the decision to procure an audit using logistic regression. Logistic regression is used because the results are easily interpretable and our dependent variable is binary.

Modeling and Prediction Using Classification Learning Algorithms

⁴ Prior to 2001, there were many changes in how the FDIC categorizes certain variables and changes in naming convention of specific accounts.

Our data set consist of labeled audited and unaudited banks and hence can be viewed as a supervised classification problem. The classification process consists of creating a classification model from data and applying the model to a unseen test example (Tan et al. 2005). The number of observations that procured an audit or did not procure an audit is relatively balanced in our dataset (Figure 1). An imbalance class may cause the accuracy measure of the models to be suspect. SAS5 and Weka software (Witten and Frank 2005) were used to manipulate and analyze the data, respectively. Using the methodology of 10-fold cross-validation, Weka's Experimenter program was used to test and compare the performance of six learning algorithms on classifying whether an independent audit was procured by a bank. A 10-fold cross-validation was used to identify potential over-fitting in the model and to reduce error variance. In a 10-fold cross-validation, we divide a dataset into ten random subsets. A subset is set aside and each learning algorithm is trained with the other nine subsets. The trained model is then tested on the omitted subset. This process is repeated ten times, each time setting aside a different subset, and the results are averaged.

The six learning algorithms used are Naïve Bayes (John and Langley 1995), Simple Logistic (Sumner et al. 2005), Support Vector Machine (Hastie and Tibshirani 1998; Keerthi et al. 2001; Platt 1999), IBK (Aha et al. 1991), JRIP (Cohen et al. 2002), and Random Forest (Breiman 2001). Comparatively, the SimpleLogistic (67.74 %) and support vector machine (67.68 %) learning algorithm performed with the highest accuracy compared with the other four (Figure 2). The prediction accuracy rates are supported by the high true positive and low false positive rates (Figures 3 & 4). These rates indicate that the two algorithms were very good at identifying audited and unaudited banks correctly. The SimpleLogistic classification algorithm is used on multi-class problems. SimpleLogistic separates the two classes using a linear hyperplane that minimizes the squared error between the observations and the hyperplane. The Support Vector Machine learning algorithm also uses a hyperplane to separate classes but tries to maximize the margin between the two classes is the combination of a nearest neighbor. Support Vector Machine algorithm is considered a hybrid between an instance based learner and a linear regression model.

Modeling Bank Characteristics Using Logistic Regression

The ability of the algorithms (SimpleLogistic and Support Vector Machine) to predict with an above 67% accuracy indicates that the decision to procure an audit is not random and may be systematic given the set of variables used. Furthermore, the high prediction accuracy of the SimpleLogistic and Support Vector Machine learning algorithms indicates the dependency of the decision to have an audit may not be linear. However, we use the generalized linear model (logistic regression) because it can be used to approximately capture the “first order” effects of the independent variables on the decision to procure a voluntary audit. Our logistic regression model is presented below:

Audit Decision Model

$$AI_{it} = \text{LOGIT}(\alpha_{tr} + \beta_1 LTA_{it} + \beta_2 NIITI_{it} + \beta_3 OFF_{it} + \beta_4 MBHC_{it} + \varepsilon_{it}),$$

5 <http://www.sas.com>

Where,

i	=	Commercial bank identifier;
t	=	Year (2001 to 2012);
AI	=	Audit indicator (Dummy Variable - 1 if the bank is independently audited and 0 otherwise);
LTA	=	Log of total assets;
NIITI	=	Non-interest income divided by total income;
OFF	=	Off-balance sheet activities divided by total assets;
MBHC	=	Bank is part of a multi-bank holding company (Dummy Variable - 1 if the bank's is part of a multi-bank holding company and 0 otherwise); and
ε	=	Error term (Residual).

Table 3 presents the findings. The findings suggest that certain bank characteristics are associated with the decision to procure an audit. The results indicate that size (LTA, Coefficient 1.0559), complexity of operations (NIITI, Coefficient 3.1967 and OFF, Coefficient 0.0865), and ownership or organizational structure (MBHC, Coefficient 0.2956) have a significant impact on the decision to procure an audit. These results are consistent with the literature.

V. Conclusions

We find that machine learning algorithms are able to predict with reasonable accuracy whether a bank is audited or unaudited. The six learning algorithms (Naïve Bayes, Simple Logistic, Support Vector Machine, IBK, JRIP, and Random Forest) used appear to have potential to accurately classify whether private commercial banks in the dataset are audited or not audited. However, the SimpleLogistic and Support Vector Machine learning algorithms had the highest prediction accuracy rate. The high accuracy of these algorithms provides evidence that the decision to procure an audit is systematic. Furthermore, using a 10-fold cross-validation, the results from this machine learning classification study show that the learning models used are not over fitted and may perform robustly with new data. However, a limitation must be kept in mind that these results are specific to this FDIC private commercial bank dataset and may not be generalizable (perform with similar accuracy in future observations or other private companies). In future studies, the SimpleLogistic and Support Vector Machine learning algorithms can be tested on other private company datasets to determine the generalizability of these results.

As a practical standpoint, this machine learning study can be used for certain business purposes such as determining the potential accuracy of financial statement information. Audited companies generally have more accurate financial information. Hence, regulators (ex. IRS), creditors, and investors may want to use these learning algorithms to separate the reliable financial information from unreliable financial information. For example, the IRS may want to pay more scrutiny to the financial information of unaudited private companies (assuming the IRS is not notified if the company is audited or not). Furthermore, investors and lenders may want to automatically filter credit or investment decision to audited companies only. However, the practical significance of this study is obviously diminished when the information about whether a particular company is audited or not is readily available. Instead, the significance of this study is in documenting the fact that machine algorithms can be trained to successfully predict the audit procurement decision, thus supporting the claim that this decision is not made arbitrarily, but rather systematically, and therefore is amenable to analysis.

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Table 1 – Summary Statistics

Audit	N	Variable	N	Mean	Std Dev	Min	Max
0	16,330	LTA	16,330	11.07	0.81	7.68	13.11
		NIITI	16,329	0.10	0.06	-0.48	0.90
		OFF	16,026	0.04	0.59	0.00	74.85
		MBHC	16,330	0.12	0.33	0	1
		AI	16,330	0.00	0.00	0	0
1	18,062	LTA	18,062	11.72	0.76	7.86	13.12
		NIITI	18,061	0.12	0.10	-2.30	1.00
		OFF	17,747	0.32	8.52	0.00	473.26
		MBHC	18,062	0.16	0.37	0	1
		AI	18,062	1.00	0.00	1	1

Variable Definitions:

AI = Audit indicator (Dummy Variable - 1 if the bank is independently audited and 0 otherwise);

LTA = Log of total assets;

NIITI = Non-interest income divided by total income;

OFF = Off-balance sheet activities divided by total assets;

MBHC = Bank is part of a multi-bank holding company (Dummy Variable - 1 if the bank's is part of a multi-bank holding company and 0 otherwise).

Table 2 - Logistic Regression Model

Variable	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	-12.354	0.185	4460.929	<.0001
LTA	1.056	0.016	4345.790	<.0001
NIITI	3.197	0.166	372.581	<.0001
OFF	0.087	0.041	4.496	0.034
MBHC	0.296	0.034	74.563	<.0001
Pseudo R-Square		0.163		

Variable Definitions:

AI = Audit indicator (Dummy Variable - 1 if the bank is independently audited and 0 otherwise);

LTA = Log of total assets;

NIITI = Non-interest income divided by total income;

OFF = Off-balance sheet activities divided by total assets;

MBHC = Bank is part of a multi-bank holding company (Dummy Variable - 1 if the bank's is part of a multi-bank holding company and 0 otherwise).

Figure 1 – Number of Audited vs Non-audited Bank Years



Figure 2 – Comparison of Learning Algorithm Accuracy

Dataset	(1) bayes.Na	(2) funct	(3) funct	(4) lazy.	(5) rules	(6) trees
Weka4	(100)	49.22	67.74 v	67.68 v	59.35 v	67.40 v
		(v/ /*)	(1/0/0)	(1/0/0)	(1/0/0)	(1/0/0)

Key:

```
(1) bayes.NaiveBayes '' 5995231201785697655
(2) functions.SimpleLogistic '-I 0 -M 500 -H 50 -W 0.0' 7397710626304705059
(3) functions.SMO '-C 1.0 -L 0.001 -P 1.0E-12 -N 0 -V -1 -W 1 -K \"functions.supportVector.PolyKernel -C 250007 -E 1.0\"' -6585883636378691736
(4) lazy.IBk '-K 1 -W 0 -A \"weka.core.neighboursearch.LinearNNSearch -A \"weka.core.EuclideanDistance -R first-last\"' -3080186098777067172
(5) rules.JRip '-F 3 -N 2.0 -O 2 -S 1' -6589312996832147161
(6) trees.RandomForest '-I 10 -K 0 -S 1' -2260823972777004705
```

Figure 3 – SimpleLogistic Algorithm

```
=== Stratified cross-validation ===
=== Summary ===

Correctly Classified Instances      23313          67.7861 %
Incorrectly Classified Instances    11079          32.2139 %
Kappa statistic                    0.3517
Mean absolute error                 0.4161
Root mean squared error             0.4557
Relative absolute error             83.4388 %
Root relative squared error         91.2584 %
Total Number of Instances          34392
Ignored Class Unknown Instances      5

=== Detailed Accuracy By Class ===

          TP Rate  FP Rate  Precision  Recall  F-Measure  ROC Area  Class
          0.622   0.271   0.674     0.622   0.647     0.736    0
          0.729   0.378   0.681     0.729   0.704     0.736    1
Weighted Avg.  0.678   0.328   0.678     0.678   0.677     0.736

=== Confusion Matrix ===

      a    b  <-- classified as
10152  6178 |    a = 0
 4901 13161 |    b = 1
```

Figure 4 – Support Vector Machine Algorithm

```
=== Stratified cross-validation ===
=== Summary ===

Correctly Classified Instances      23281          67.6931 %
Incorrectly Classified Instances    11111          32.3069 %
Kappa statistic                    0.3495
Mean absolute error                 0.3231
Root mean squared error             0.5684
Relative absolute error             64.7781 %
Root relative squared error         113.8228 %
Total Number of Instances          34392
Ignored Class Unknown Instances      5

=== Detailed Accuracy By Class ===

          TP Rate  FP Rate  Precision  Recall  F-Measure  ROC Area  Class
          0.616   0.268   0.675     0.616   0.644     0.674    0
          0.732   0.384   0.678     0.732   0.704     0.674    1
Weighted Avg.  0.677   0.329   0.677     0.677   0.676     0.674

=== Confusion Matrix ===

      a    b  <-- classified as
10053  6277 |    a = 0
 4834 13228 |    b = 1
```

Management of Conflict in Family Businesses during Crises and Changes: A Strategic Alliance Perspective

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ABSTRACT

Since small businesses play an ever-growing role within the U.S. economy, it is important to identify issues which are specific to family businesses so as to further ensure their success. The objective of this study was to examine how family relationships affect the family firm when a conflict arises due to loss of cohesion when crises occur within the firm. Likewise, conflicts arise in the strategic alliance entity due to the nature of the alliance (or cohesion) and the goal achievement of its customer, which could affect the sustainability of the alliance (De Feis, 2013). Furthermore, the unique parallel between family businesses and strategic alliances will be offered and elaborated on with connections to future research. This paper uses Olson's (1987) two specific family variables - family cohesion and family adaptability - to study the effects that these constructs have on the level of conflict within the family firm during moments of change.

Introduction

Small businesses play an integral role in the US economy. As of December, 2011, there were 5.68 million small businesses in the United States employing approximately 50% of the private work force (US Census Bureau, 2011). These businesses are responsible for the majority of sales within the US, generate about one-half of the private sector output and create the majority of net new jobs annually (Astrachan & Shanker, 2003). Most small businesses are classified as family businesses and are estimated to contribute 64% of the United States' Gross Domestic Product (GDP) (Astrachan et al., 2003).

Because family businesses play a strategic role in the U.S. economy, researchers have been committed to investigating the family business in detail. Further analysis on family businesses brings up the natural alignment between 'family businesses' and 'strategic alliances' vis-à-vis trust, cohesion, culture, and bonding, and the goal achievement of the customer for whom the 'family business' (or, 'alliance') works (Das & Teng 1998, 2001, 2004, Markman & Gentner 1996). Important contributions towards the furtherance in business of family relationships and strategic alliances are offered. In addition, according to Ibrahim, Angelidis and Parsa (2008) "academic institutions have recognized the importance of these businesses by establishing research centers, family business programs, academic and practitioner-oriented journals, and shared professorships in family business studies" (p.96).

Given the economic importance of family businesses in the United States, it is essential to identify issues specific to family businesses when compared to non-family businesses. Kepner (1983; 1991) found that the familial structure and family business are so intertwined that it becomes difficult for one not to significantly impact the other when change occurs in either. "In a family firm, the strands of the family system are so tightly interwoven with those of the business system that they cannot be disentangled without seriously jeopardizing one or both systems" (Kepner, 1983, p.57). Similarly, when change occurs in one of the strategic alliance partners, which are non-family alliances, per se, the change will impact the other firm.

Much has been written about how important and influential succession plans are to the continuation of the family business (Davis & Harveston, 1999; King, 2003; Royer, Simons, Boyd, & Rafferty, 2008). But many researchers have concluded that family business survival is not as dependent on external factors such as technology, customers or competition, but more so from internal factors stemming from the relationships with and between family members (Lee, 2006; Sundaramurthy, 2008; van der Merwe & Ellis, 2007). Although strategic alliances are in existence for a defined period of time (Gulati, 1998), succession planning of the alliance must be considered if it becomes a longer term, with changes in management as time passes. And, certainly, if the founder had a child(ren), the relationship between the founder and his offspring would be hard to separate from the relationship between the founder and his subordinates – good relationship or bad relationship.

Schulze, Lubatkin and Dino (2003) found that family firms are more susceptible to family problems affecting the firm than non-family firms. Because family presence dominates within the constructs of the family business, there is an ever-present opportunity for conflict and tension to arise in the business and family structures (Harvey & Evans, 1994). Family priorities and interests influence the family firm's operations, creating problems unique to them, many of which result in creating relationship strains between participating and nonparticipating family members (Alizadeh, 1999). Also, the aspect of "trust" in family relationships and strategic alliances cannot be overlooked (Das & Teng 1998, 2001, 2004), as well as some elements of game theory, which always complicates matters (von Neumann, J. & Morgenstern, O. 1944; Parkhe 1993).

The objective of this study is to examine how family relationships affect the family firm when conflict arises due to crises occurring within the firm. This paper uses Olson's (1987) two specific family variables - family cohesion and family adaptability- to study the effects that these variables have on the level of conflict within the family firm during moments of change. The other objective of this study was to align the family relationship entity with the strategic alliance entity, and state the similarities of these two types of "partnerships."

The research looks at two types of change factors which may occur within the family business: internal change factors, such as succession and multigenerational involvement; and external change factors such as economic factors affecting the firm (Romanelli & Tushman, 1994). All organizations which are open systems (Daft, 2010) must consider the internal side and the external side. The internal side is more pressing when there is a multi-generational component, and it is less pressing when succession will come from the outside the family structure. The aspect of internal-external is vitally true for strategic alliances (Das & Teng 2000).

Definition of Family Business

Chua, Chrisma and Sharma (1999) reviewed over 250 papers in the family business literature and found that "the definitions include three qualifying combinations of ownership and management: (a) family owned and family managed; (b) family owned but not family managed; and (c) family managed but not family owned" (p.20) and propose that the definition of a family business is "a business governed and or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families" (p.25).

Chua, et al. (1999), conclude that families strongly influence and shape all facets of the business. Olson, Zuiker, Danes, and Stafford (2003) claim that the family has a more influential role in affecting the business than the business has on the family. McCollum (1990) states that "when one looks at the family firm, one is really looking at the interaction of two complex social systems" (p.251). This interaction can therefore influence attitudes and conflicts within the working environment because family obligations and structures are constantly present within the family firm (Harvey et al., 1994).

Definition of a Strategic Alliance

A *strategic alliance* (SA) is a mutually beneficial long-term formal relationship formed between two or more parties to pursue a set of agreed upon goals to meet a critical business need while remaining independent organizations. It is a synergistic arrangement whereby two or more organizations agree to cooperate in the carrying out of a business activity where each brings different strengths and capabilities to the arrangement. The partner firms capitalize on efficiencies (bettering transaction costs) (Williamson, 1979), reduce the need for expertise or resources (reducing dependencies) (Barney, 1991), and gain in the isomorphic way of doing business (mimetic following) (DiMaggio & Powell, 1983). A SA can be viewed as the "seller" of its products or services. The customer of an SA can be considered the "purchaser" of the alliance's products or services. It is hypothesized that the seller dyad could deem its activity successful if the relational cohesion between partners in the dyad is strong (Lawler & Yoon, 1993, 1996; Thye, Yoon, & Lawler, 2002). In addition, it is also hypothesized that the customer of the SA has certain needs to satisfy to deem the goals it set are indeed achieved (Locke & Latham, 2002; House, 1971).

Family Conflict

Conflict is a dominant characteristic of the family firm due to the participatory existence and influence of the family (Sorenson, 1999), making it an ever-present influence on the firm's members and "that in comparison to nonfamily businesses, family businesses have a more complex set of issues to consider when managing conflict" (p.325).

Because family and the family business are so intertwined, conflict can play a detrimental role within the relationships of family members working within the firm (Kellermanns & Eddleston,

2004). "Conflict is complex in family firms due to the presence of a generational shadow; that is, the prior generation's involvement in the family firm can cause social disruptions" (Eddleston, Otondo, & Kellermanns, 2008). Davis and Harveston (1999) also found that multigenerational involvement can lead to complex conflicts within the family firm. As family ownership increases, especially over generations, family factions may arise, creating different firm objectives and goals which can lead to a potential increase in conflict (Gersick, Davis, Hampton, & Lansberg, 1997).

Strategic Alliance Conflict

When conflict arises in the strategic alliance entity, there is an element of game theory that comes to roost. Each alliance partner strives to continue to work on behalf of their customer, which sometimes puts them at odds with their partners(s). Clearly, if the strategic alliance partnership is coming to an end, there would be position that goes on to align a strategic partner with the customer (De Feis, 2013).

Family Relationships

Family relationships play an integral role within the family business and contribute to the firm's level of success and ability to cope with conflict. Amundson (1997) states that "family relationships may not appear to be too important to the success of a family business until you witnessed the unraveling of a great organization due to family bickering, back-biting or outright conflict" (p.3, as cited by Lee, 2006). The findings of Olson, Zuiker, et al (2003) concluded that the family has a far greater influence in affecting the family business than the business has at impacting family matters.

The influence and pressure of the family itself can obstruct the family business's ability to create a cohesive management unit, hindering its ability to decipher or establish proper business policies and procedures. Benson, Crego and Drucker (1990) concluded that the underlying family influence found within family firms was a contributing factor to business mismanagement and poor decision-making within family business operations. Family priorities and personal interests influence the family firm's operations, resulting in the creation of problems unique to family businesses where the interpersonal relationships between family members become strained and stressed, thus hindering key business relationships and core business functions (Alizadeh, 1999).

Strategic Alliance Relationship

The strategic alliance relationship is crucial to the success of the partnership. Just as family priorities and personal interests influence the family firm's operations, the priorities of the alliance partners and personal interests could help and hurt the strategic alliance. The different aspects of the relationship need to be considered for "much has been written about the relationship between strategic alliance partners, relative to authority, governance and structure, conflict, trust, and culture" (De Feis, 2013, p. 24).

Family Systems

Olson, Russell, & Sprenkle (1989) developed the theory that the major components in any family system are the two theoretical concepts of family cohesion and family adaptability. Lee (2006) utilized Olson, et al.'s (1989) concepts to document the influence of family relationships on the outcome of the family business's organizational commitment, job satisfaction, life satisfaction and propensity of family members to leave the firm. Lee (2006) determined that "family adaptability is more important than family cohesion in family relationships... (but family cohesion) is a significant independent variable" (p. 186) when examining facets of the family business.

According to Olson, et al. (1989) and Maynard and Olson (1987), family cohesion is defined as "the emotional bonding and the degree of individual autonomy that family members experience...(encompassing elements of) supportiveness, family boundaries, time and friends, and interest in recreation" (p. 502). Family cohesion can be divided into four specific levels: (1) disengaged (very low); (2) separated (low to moderate); (3) connected (moderate to high); and (4) enmeshed (very high) (Maynard & Olson, 1987).

Family cohesion is considered to be in a state of balance (separated or connected) when family members are independent but stay in touch with their families, participate in certain decision-making processes, and lend support when needed. The unbalanced areas of family cohesion are found at the engaged and enmeshed levels. Disengaged families have little to no commitment to the family system, whereas enmeshed family members have limited independence and a loss of individual identity due to the involved role that family plays in an individual's life.

Family adaptability refers to "the extent to which the family system is flexible and has the ability to change. It is the ability of the family system to change its power structure role relationships and relationship rules in response to situational and developmental stress. The elements of this dimension are leadership, control, discipline, and roles and rules" (Maynard & Olson, 1987, p. 502). From this, it is determined that there are four levels of family adaptability: (1) rigid; (2) structured; (3) flexible; and (4) chaotic (Olson et al., 1989). Balance within a family unit is found within the structured and flexible levels of adaptability. A structured family unit is democratic by nature, where roles are defined and rules are established and followed, with seldom changes taking place. A flexible family system promotes equal rights, and decisions are carried out in a democratic fashion, as rules can be changed and modified. A family system is said to be unbalanced when it falls within the rigid or chaotic levels. A rigid family structure is controlled by a pseudo-dictator, where roles are strictly defined and never changed or challenged. Within the chaotic family structure, leadership is unclear, and roles are constantly changing, creating dysfunction and uncertainty among family members.

The intent of this research is to examine how these family relationships of cohesion and adaptability affect the family business during moments of internal or external change factors and crises.

Strategic alliance systems also must consider the cohesiveness of the alliance partners, which manifests itself in the repeated renewal of the alliance. The various dimensions that are useful in

considering relationships between two alliance partner entities will be useful to consider, such as (1) authority, (2) governance and structure, (3) conflict, (4) trust, and (5) culture. However, potential problems arise which can be analyzed using a game theory approach (Parke, 1993, von Neumann & Morgenstern, 1944).

Consequences of Family Relationship: The Management of Conflict within Family Businesses during Moments of Crises and Change

Since the family and the family firm are so intertwined (Kepner, 1991; McCollum, 1990; Olson et al., 2003), the composition of family cohesion and adaptability in the family system is critical when examining how the firm manages conflict. Kepner (1991) states that the management of conflicts within the family firm "refers to the way in which a family system deals with differences between and among its members. Some differences are preferences, the result of which is arrived at by the process of "give-and-take"; other differences may be profound: Differences in values and their perceptions about the systems goals and purposes are not so easily resolved" (p. 62).

Conflicts between family relationships and family business can emerge within the firm from either an internal change factor such as succession and multigenerational ownership (Davis et al., 1999; King, 2003; Lambrecht, 2005) or from external change factors such as during times of financial crises or economic stress (Romanelli & Tushman, 1994).

Consequences of Strategic Alliance Relationship: The Management of Conflict within a Strategic Alliance during Moments of Crises and Change

Likewise the strategic alliance relationship might sour at some point before the relationship achieves its goals and objectives. The stresses on the strategic alliance might come from both the industry environment, within which it deals, e.g., changing markets, changing customer base, changing suppliers (Porter, 1980). Stresses can also derive due to forces caused by changes in the general environment, e.g., economic, demographics, government.

Internal Change Factors: Succession and Multigenerational Ownership

Research has shown that during periods of succession or multigenerational ownership, conflict emerges within the family firm. Lansberg (1999) established that family business partners "are reluctant to empower members of the next-generation because doing so implies they eventually must move out of the way and turn over control to them" (p. 202). Davis and Harveston (1999) concluded that when multigenerational involvement is present within family firms, complex conflicts can develop as a result of their participation as well as with decision-making processes within the firm.

As family ownership increases, especially over generations, family factions may arise, creating different firm objectives and goals, which can lead to an increase in conflict within the family business (Gersick et al., 1997). Since family presence dominates within the constructs of the family business (Harvey and Evans, 1994) and strongly influences and shapes all facets of the family business (Chua et al., 1999), family system compositions are a contributing factor to the

level of conflict found specifically within family firms. Family component variables such as family cohesion and family adaptability must therefore play an influential role during such internal change factors of succession and multigenerational participation and involvement.

"Because a family business is an embodiment of the aspirations and capabilities of family members, it has a strong social element affecting the decisions that determine its strategy, operations, and administrative structure. Furthermore, because the social element itself has value to the organizing family, it tends to persist over time, giving the family organization a unique character and culture" (Chrisman, Chua, & Steier, 2005, p.238). This social element which derives the unique character and culture within the family firm can be seen as a function of family cohesion since family cohesion refers to the degree of closeness and emotional bonding experienced by family members within their social setting (Lee, 2006; Maynard and Olson, 1987).

Family cohesion is said to be in a state of balance (separated or connected), when healthy boundaries are established between the family and the firm (Kepner, 1991; Olson et al., 1989). When boundaries between the family and the business become diffuse and enmeshed, the needs and values of each separate unit become difficult to distinguish, which may result in business decisions being made primarily for the good of the family, without regard for the business (Zody, Sprenkle, MacDermid, & Schrank, 2006). These symptoms of dysfunction in the family business can arise during periods of change, such as during the succession planning process (Kepner, 1991). Therefore, the family that is cohesively unbalanced should not be able to separate the emotional aspect introduced into the family business (as a result of the familial influence) when plans for a successor are introduced or with the introduction of multigenerational family participants within the firm. The ultimate strategic alliance might become a merger, but they, too, are sometimes misaligned, e.g., AOL-Time Warner. These two companies joined in 2000 and abandoned each other within ten years. Strategic alliances must be cohesive, trusting, and have authority and a governance structure in-place beforehand, with an opportunity to resolve conflicts before they blow up.

Proposition 1a: Family businesses with enmeshed levels of cohesion within the family system will hinder effective business unit performance during internal transition events such as family business succession or multigenerational participation.

Carney (2005) found that there exists three characteristics of family firm governance: parsimony, personalism, and particularism, and determined that these characteristics make available distinct gains in efficiency, social capital, and opportunistic investment specifically to the family firm. The ways in which family firms exploit these three characteristics will determine whether these inherent advantages lead to better decision-making and performance (Chrisman, Steier, & Chua, 2006). The success of, and impact on the decision-making process of the family firm is determined by which family members are involved in the process (Chrisman et al., 2006).

Families that are flexible and adaptable have been shown to possess the ability to change their power structures and share in leadership and control within the family unit (Olson, et al, 1989; Maynard & Olson, 1987). This democratic structure found within the structured and flexible family systems makes family members more involved in the decision-making processes and

well-being of the family business, thereby helping “family members to negotiate their individual expectations better and formulate a shared vision of the business” (Lee, 2006), whereas family businesses that adhere rigidly to established decision-making policies can deter members from exercising certain individual qualities which may provide the opportunity to enhance both the business and family life (Zody et al., 2006). Therefore, members of the family business whose family adaptability structure is perceived as rigid should be less accepting of eventual change in leadership or during issues of succession. The same can be applied to the family firm when multigenerational involvement or participation takes place within the family firm.

Conceptual Composition of Family Relationship Structure as it Relates to the Well-Being of the Family Business

Family Cohesion

		Disengaged	Separated	Connected	Enmeshed
Family Adaptability	Chaotic	Detrimental	Suboptimal	Suboptimal	Detrimental
	Flexible	Suboptimal	Optimal	Optimal	Suboptimal
	Structured	Suboptimal	Optimal	Optimal	Suboptimal
	Rigid	Detrimental	Suboptimal	Suboptimal	Detrimental

Proposition 1b: Family businesses with rigid levels of adaptability within the family system will hinder effective business unit performance during internal transition events such as family business succession or multigenerational participation.

External Change Factors: Financial Crises and Stress

Because the family has such a vested financial stake within the family firm, moments of financial crises can render the owners unable to successfully defend against such crises due to the resulting increase in conflict and tension between family and business goals (Danes and Rettig, 1993, as cited by Danes, Leichtentritt, Metz and Huddleston-Casas, 2000). "The stages of behavioral reaction associated with a troubled business are not unlike those of grieving for a family member. These stages typically include shock, denial, anger, depression and bargaining"

(Smith & Berger, 1993) before the members are able to act to create a viable business plan to defend against financial crises.

When financial crises occur within the family business, the members' livelihood, net worth, community status and identity within the family and the firm can create an emotional roadblock where members' self-esteem can become damaged, rendering members unable to act rationally during such crises (Smith and Berger, 1993). Since financial crises can substantially influence the family firm and render it almost immobile in its decision-making process, family system variables of family cohesion and family adaptability may contribute to how the firm and its members react when managing and defending against financial crises.

Olson, et al. (1989) determined that during periods of distress, families that were cohesively balanced tended to unite together, whereas families that were unbalanced showed discordance within the family unit. Given that the family system and the business system are so tightly interwoven and indistinguishable from each other (Kepner, 1983), unbalanced levels of cohesion within a family business system should therefore obstruct family members' abilities to minimize conflict and tension among themselves and hinder the establishment of viable business goals during moments of financial crises. This should deter members of the firm from acting in a judicious and rational manner when defending against such crises.

Proposition 2a: Family businesses with enmeshed levels of cohesion within the family system will hinder effective business unit performance during periods of financial crises.

Given the fact that "family firms survive in fewer numbers against greater odds than their non-family business counterparts...these family-firm survivors must possess a possible "annealing" advantage. (Family) firms that have weathered and overcome difficulties have enhanced survival qualities and capabilities" (Nicholson, 2008, p.114). Nicholson (2008) states that one of the mitigating factors of survival is the family firm's need to be flexible in the allocation of roles and responsibilities. Families that are adaptable have been shown to possess a democratic power structure where a balanced family system would make family members more involved in the decision-making process (Olson et al., 1989). This would help formulate a shared vision of the business since families strongly influence and shape all facets of the family business (Chua et al., 1999). A rigid adoption of these roles and responsibilities can put the firm at risk for failure (Nicholson, 2008) during moments of crises. This may limit family business members' abilities to respond to crises in a timely manner, and therefore may prevent family business members from participating in developing a viable business plan during such moments of crisis.

Proposition 2b: Family businesses with rigid levels of adaptability within the family system will hinder effective business unit performance during periods of financial crises.

Methodology

In order to examine Olsen et al.'s (1989) theoretical concepts of family cohesion and family adaptability as it relates to the effects it has upon the family business, a qualitative approach was developed whereby an exploratory process was undertaken to discover how the constructs and

relationships of the family impact the family firm. Strauss and Corbin (1998) consider this methodology to be a primary function in deciphering constructs and relationships in a qualitative study. For this study, we use one author's firsthand experience of growing up and working within the family firm for examining the theoretical concepts of the family structure as it relates to the interactions and business decision-making processes by participating family members. The timeframe examines periods of internal change during the succession process and the introduction of multigenerational family members into the firm. This internal change factor coincided with a severe period of financial stress within the family firm where these internal and external change factors had negatively affected the firm, as well as the family.

One co-author had over 25 years experience working within a family firm and grew up within a family whose only source of income was derived from the family business. The author was deeply involved in the family firm and participated on many levels within the company that was once one of the largest private residential real estate development firms in the Northeast United States.

The Case - Rigatoni Family Business⁶

Rigatoni Brothers Homes was a family-owned and operated real estate development company founded in 1963 by four immigrant brothers. The company started out as a small construction framing company which, by the late 1980s, would eventually evolve into one of the largest real estate development firms on the East Coast.

The ownership of the company was evenly divided among four of the family's brothers, even though their levels of education and job descriptions were quite different. Franco, the oldest brother, was the president of the company and had a degree in engineering from the University of Naples in Italy. The other three brothers were carpenters by trade with no advanced level of education except for some trade school training. The third brother, Ferruccio, would eventually become the company's chief field superintendent who would report back to Franco about the progress of each specific job site. The other two brothers, Felice and Valerio, were given limited management responsibilities, each being in charge of specific construction crews. As chief crew members, they were also expected to participate in the physical labor aspects as carpenters.

From the beginning, each of the four brothers had developed close relationships with each other outside of the family business. The business had primarily been formed before any of the brothers had gotten married and all were still living within the confines of their parents' home. From the beginning, they were each in agreement that as the business evolves into a successful venture, each brother could bring his children into the family business with the hopes of creating a formidable and integrated real estate development firm that would have the ability to span generations.

⁶ *All company and personnel names in this case have been disguised to protect individual and organizational privacy.*

Family Background and Structure

Lido and Vera Rigatoni had raised seven children in Italy during and after World War II. Lido, a mason by trade, worked long hours and left the responsibilities of raising a family with Vera. Because of this, Vera became the strong matriarchal figure within the Rigatoni family. She felt that in order to survive as a family in war-torn Europe, the Rigatoni family must function as a collective unit where she would be in charge of delegating familial roles among the siblings. She instilled in her children that the family unit must always be present, playing an integral role in each of the children's lives. Each child was expected to follow the designated roles and jobs that were defined by Vera and were not expected to question or be diverted away from their assigned responsibilities. This was done in order to establish stability within the Rigatoni family during such uncertain times, where family involvement would dominate the individual's lives in order to ensure a safer environment for her children.

Since Franco was the oldest of the siblings, he was given the most responsibilities and was put in charge of his brothers and sisters whenever Vera was not present. This would eventually lead to Franco inheriting the role of patriarch within the family and family business many years later.

As a result of the familial structure created by Vera, the brothers were taught to rely and depend upon each other. Therefore, after all the brothers had immigrated to the United States, the familial structure had provided the foundation to form a family business. In 1963, four of the Rigatoni brothers went into business and established their first corporation. The role of each brother within the company was clearly defined, whereby Franco, de facto, would lead the company as president. There was no issue as to the leadership role since Franco had been designated by Vera as the heir apparent patriarch for the Rigatoni family. This, coupled with his level of education, enabled Franco to become the leading figure head within the company without any opposition or conflict from the other three brothers.

As the family grew and the business evolved, the four brothers became much closer, both in business and as families. The social, family and business lives of the brothers became indistinguishable due to the constant interactions among them. Franco was best man for two of his brothers' weddings and was also godfather to each of the firstborn children of the other three brothers. Every holiday was spent together where Franco and his wife expected each of the brothers' families to participate. These familial actions and representations further emphasized how Franco had evolved into the patriarch of the family and family business, and was supported as such by the entire family after Vera's death.

As far as the family business was concerned, Franco further became entrenched as the leader when, in the late 1970's, he decided that the company should evolve from a construction framing company into a residential real estate development company. The success of the first real estate development venture could be contributed to the fact that each brother had been given a specific job description by Franco, whereby each brother was expected to fulfill his designated business obligation while keeping a watchful eye over the entire development.

With the growth and success of the Rigatoni family business came the growth and prosperity of the Rigatoni family. Each of the four brothers was married with children, and by default, the

Rigatoni family business had to provide for their well-being. The burden fell upon Franco to see that the family business would provide economic stability for the brothers' growing families. The business structure and financial situation was such that Franco was the only one capable of planning for the growth and financial success of the company, while the other brothers were not conscious of the stress that a growing family had placed upon Franco and the family business. Franco was able to accomplish this by himself up until 1980. At this time, Franco had decided that the business had grown too large for him to be overseeing the internal and external operations of the business and had decided that the third brother, Ferruccio, would be given the responsibility of chief field superintendent. This would enable Franco to have more time to focus on the demands a growing real estate development company was having. Franco had decided to focus on the financial planning aspects, site selection process, contract negotiations, and development and planning meetings of the business but was reluctant to turn over complete control of site supervision to Ferruccio. During this period, the job description of the other two brothers, Valerio and Felice, had remained unaffected with little to no resentment or hostility over Ferruccio's promotion.

In addition to becoming the site supervisor, Ferruccio was introduced by Franco into the local building industry association which the family business was a member of and where Franco was currently an officer in line to become president of the association.

As a result of this change in structure, Franco established an "end of the day" meeting where all the brothers would report the daily progress, as well as events and plans for the days ahead. Upon hearing each brother's status report, Franco would make decisions based upon each brother's report as to what should be done going forward. Also at this time, Franco would make privy to the brothers any business decisions that were made on his part pertaining to contract negotiations, bank loans, and sales status of the business. Most of Franco's decisions were never questioned, and each of the brothers had defaulted to Franco's judgment as to the appropriate course of action taken for the company.

Internal Change Factors of Succession and Multigenerational Involvement

There had been in place an informal agreement among the four Rigatoni brothers that if any of their children wished to enter the business, they would all be welcomed. The most vocal of the brothers about this understanding was Franco, who believed that the business would benefit immensely from this, especially since he had envisioned that his son, Robert would eventually become his successor.

Since early in Robert's life, Franco had privately groomed him into being the heir apparent to the family business in much the same manner that Vera had groomed Franco into eventually becoming the family patriarch. Franco thought that this was a most logical decision since Robert had worked in the family business for many summers and was about to graduate with a college business degree. Franco thought it best that Robert should work for the family firm directly upon college graduation in the capacity of a corporate officer in charge of purchasing and sales. Robert's other duties included looking into expanding the business into industrial and commercial real estate development areas. Most of these duties had been Franco's sole responsibility, and it became apparent to the other brothers that Franco was grooming Robert to

be his successor, thereby usurping the belief that Ferruccio would eventually replace Franco if and when Franco decided to step down as president.

Franco never openly disclosed his successor intentions and made a unilateral decision as to whom he felt was the most qualified successor to lead the family business without consulting the other brothers as to Robert being his choice. Given the fact that Franco had promoted Ferruccio just a few years prior and had given him a substantial amount of responsibility in the family business, this change in successor designation became unsettling to Ferruccio. This change began to lend itself to a situation where factions arose within the family, forcing each brother to choose between Franco and Ferruccio for control of the business.

Robert's entry into the family business was perceived as a threat by Ferruccio and Julio, especially since each one believed that Ferruccio was to be the company's successor. This was compounded by the fact that neither one of these brothers had any children who had shown interest in entering the family business. Ferruccio and Julio began to openly question any decisions that Robert was making, asking for proof or facts to support and justify Robert's pronouncements. This had never been done among the brothers before since Franco, who was formerly in charge of these areas, was very rarely questioned about his decision-making ability. Tension began to rise during the daily "end of day" meetings as a result, when the brothers began to argue and second-guess the decisions made not only by Robert but by all the other brothers as well.

Just a few years prior to Robert's full-time entry in the family business, the Rigatoni brothers' youngest brother, Julio was brought into the family business due to Julio's lack of success and financial difficulties stemming from his solo business ventures. The brothers had unilaterally agreed that Julio's salary would be comparable to theirs, would participate in corporate profit sharing, and be given a minority stake in the family business without having the responsibilities of financial contributions to the firm.

When Robert came into the firm as a full-time employee, he was not given equal member salary as Julio had initially been given, nor was he promised profit-sharing participation. He was told by the firm's accountant that he would be paid a fair salary based upon his business degree, and that a first-year bonus was likely, given the current health of the real estate market. When the end of year financial review showed a healthy profit for the Rigatoni family business, Robert was denied a bonus due to Ferruccio's and Julio's adamant opposition. This created much friction between the brothers and Robert. Franco had become torn between placating his brothers and satisfying his son's demands. Franco began to see his status as the family patriarch and family business leader become compromised from the hostility being created by Robert's introduction and designation as successor to Franco. This tension began to spill over into the Rigatoni households and family functions. Franco's wife and Robert's mother, Patricia, did not want to see her son exploited by the business and began to have reservations about her brother-in-laws and their intentions, and Ferruccio's wife began to question Franco's authority to the other brothers' wives.

External Change Factor of Financial Crisis

Shortly after Robert began working for the family firm, the United States economy began to face a banking and credit crisis which deeply affected the real estate industry during the early 1990s. Savings and loans, the lifeline of residential real estate financing during this period, began to become insolvent at a rate not seen since the Great Depression. As a result, financing for new developments and refinancing of existing loans became extremely difficult and costly. The value of residential homes began to fall at a substantial rate in the Northeast where the Rigatoni family had been developing residential homes. This decrease in value significantly affected new home sales and the financial stability of the Rigatoni family business.

Just prior to this real estate downturn, the Rigatoni family business had undertaken many different residential and commercial developments whereby massive capital contributions were made and loans were taken at all of the sites. The Rigatoni family business had not lost money for many years and had shown substantial profits for almost a decade. This continued profitability allowed for the acquisition of new residential, commercial and industrial sites through heavy financial leveraging which was now compromised as a result of the economic crisis.

One residential site in particular was financed by a local savings bank, and the mortgage given for this job was the maximum allowed by banking standards for the given size of the savings bank. Because the residential development was a high-rise, multiple dwelling condominium complex, the project, by default, required that all the units be built prior to being sold and occupied by purchasers. The result was that the job itself had created a tremendous amount of residential inventory at a time where condominium prices were being devalued at a substantial rate. This resulted in the condominium development being valued at less than what had been estimated by Franco prior to its inception. In addition, sales were declining at all of the Rigatoni family's developments, and loans were coming due on their commercial and industrial parcels. This resulted in a substantial cash flow crisis for the company.

The Rigatoni brothers were not able to abandon any of the sites since each bank had required that all the brothers sign personal guarantees for each of the loans. During this time, Franco had also adamantly refused to file for bankruptcy protection, claiming that the family's reputation would be compromised if such a detrimental action were allowed to occur. Franco felt that the only solution was that each brother had to provide personal capital contributions into the business from their personal investment accounts. This was only a temporary solution, and a few months later the family business was forced to auction off as many residential condominium units as possible in hopes of satisfying the bank's demands and creating enough liquidity to maintain interest payments on the other sites.

As a result of this financial crisis, Ferruccio and Julio began to put forth demands to Franco to substantiate why these losses were mounting. Because Franco was forced to concentrate his efforts on satisfying their inquiries, he was not afforded the time to properly manage a financial crisis of this magnitude in the best possible manner. As the residential market worsened, losses were mounting from every development. Ferruccio put forth to the other brothers that the business could not possibly be losing so much money and accused Franco of embezzling the money instead. Ferruccio hired an attorney and accountant to review the financial status of the

business, thereby further limiting Franco's time and ability to properly contend with the mounting financial crisis. Robert was too inexperienced to be able to properly handle such a crisis situation, and the other two brothers, Valerio and Felice, carpenters by trade, had always relied upon Franco to contend with any issues and problems that the company had encountered.

The embezzling accusations weighed heavily within both the company and the family. Collective efforts could not be focused on the crisis at hand since the accusations had to be refuted. Instead, efforts were made to assemble a legal and accounting team to quell Ferruccio's accusations and prove that the losses were indeed from a depressed real estate market. The family business began to suffer as a result and was on the verge of bankruptcy. Factions began to arise within the Rigatoni family itself, where non-business participating family members were solicited by Ferruccio and Julio to choose sides in an attempt to oust Franco, not only from the presidency of the family business, but as patriarch of the Rigatoni family as well. Wives, sisters and cousins had become so deeply involved in the financial matters of the business that it divided all the Rigatoni families and permanently affected their relationships and led to the dissolution of the Rigatoni family business.

Discussion

An assessment of the Rigatoni family structure as defined by Olson et al.'s (1987) theory suggests that the family's level of cohesion was a highly enmeshed situation. This can be confirmed when examining how the brothers had all interacted with each other from a very early stage and how their social lives had become interwoven within the business. Being children of World War II gave their family structure little room for individual independence since the survival tactic instilled into them by their mother, Vera was one where all family members had to be enmeshed within the family system in order to provide security and ensure safety. This situation forced each of the brothers to strongly commit to the family system at a very early age where this family mentality carried over into the brothers' lives as they started and developed the business. As confirmed by Kepner (1983), the social lives and business lives of the brothers became indistinguishable where they had turned to each other for social, family and business support on a continuing basis. There was limited individual autonomy of business decisions carried out by the brothers other than Franco. At the "end of day" meetings, Franco was the one who decided and determined what course of action each brother should take, given his business role. This micromanagement oversight by Franco was a direct result of Franco's position in the family as patriarch, where his authority and leadership had never been questioned until a severe crisis had confronted the family business. This, coupled with the fact that the brothers' social lives consisted of only interacting with each other, further emphasized the enmeshed family cohesion structure found within the Rigatoni family.

The level of family adaptability can be assessed as being a rigid family structure given that there was no democratic voting among the brothers as to who would lead the family business. Family and business leadership was automatically assumed to fall on Franco's shoulders, as he was Vera's chosen heir apparent family leader. Franco was also responsible for deciding how each of the brothers' roles within the business would be established, defined and executed with all of the brothers willfully agreeing to Franco's leadership and management of the family business. The

inability of the Rigatoni family system to change its power structure role relationship and relationship rules in response to the crises presented further reinforces the rigid unbalanced structure of family adaptability within the confines of the Rigatoni family.

The introduction of Franco's son, Robert into the family business was the first time the Rigatoni family had to contend with multigenerational involvement. At first, the brothers were open to the idea of having their business be able to span generations, with the notion that a real estate empire could be a lasting legacy of theirs. Each of the brothers had children and had hoped for them to take part in the family business, thereby creating a sense of familial strength among all of the brothers' families. There had been no conflict or animosity among the brothers when the youngest brother, Julio was brought in to the family business as a partner. When it became clear that Robert would be the only child who would participate in the family business and be Franco's successor, Ferruccio was reluctant to give up any of the power that Franco had given him and conflicts began to develop as a result (Davis and Harveston, 1999; Lansberg, 1999). These conflicts were emphasized by Ferruccio's actions against Robert; Ferruccio had openly questioned any and all over Roberts business decisions in an attempt to undermine Robert's authority and reestablish himself as the successor to Franco.

What was once viewed as a unified family unit and business, the Rigatoni family began to demonstrate symptoms of dysfunction as Robert further became empowered by Franco. The "end of day" meetings which were once a source of Franco's control and management ability became an arena of conflict and hostility which threaten to undermine his leadership role. Because the cohesive family structure between the Rigatoni family and business were so enmeshed, the brothers were unable to cope with the emotional aspects that Robert's participation brought into the family business and allowed for Ferruccio to faction the family and seek alliances through the conflict (Gersick et al., 1997). This would support the hypothesis that family businesses whose cohesive levels are enmeshed would have greater difficulty assimilating new multigenerational participants into the family business, with the threat of conflict arising as a result.

Since the family structure has been determined to be rigid (where Franco controlled the direction of the business and the roles each brother would have), the family was not able to cope with the complex conflicts that had developed as a result of Robert's multigenerational involvement in the family business. This lends to Davis and Harveston's (1999) conclusions concerning multigenerational involvement and the resulting associated conflicts and emphasizes the fact that these conflicts have the ability to be amplified as a result of the family structure being unbalanced and lacking adaptability.

Since his childhood, Franco had never been challenged by any of his brothers about his leadership role or ability and became threatened by Ferruccio's actions and accusations. The other two brothers, Valerio and Felice, were not able to create a mitigating balance between Franco or Ferruccio because they did not possess the necessary skills that might have been afforded to them had the family structure been more flexible and adaptable. The family structure boundaries of rigid adaptability found within the Rigatoni family had deterred Valerio and Felice from being able to exercise any individual qualities that would have provided an opportunity to resolve the conflict brought on by Robert's participation (Zody et al., 2006). If each brother had

been more involved in the decision-making processes and well-being of the family business, rather than rely solely upon Franco for all of the decisions, the brothers might have been able to identify and recognize not only their own individual expectations of the business but of those of each of the individual brothers as well. This might have allowed the brothers to establish a clear vision of the businesses development and growth objectives necessary for a multigenerational family business to succeed (Lee, 2006) rather than allow the conflict to further develop. This lends support to Hypothesis 1a that family businesses with enmeshed levels of cohesion within the family system will hinder effective business unit performance during internal transition events such as family business succession or multigenerational participation.

Since Franco had to defend the accusations of embezzlement during the company's severe financial crisis, he was unable to attend to establishing a viable business plan to defend against the crisis. Valerio and Felice were not capable of developing a viable business plan to counter the effects that the financial crisis was having on the firm since all critical decisions had been the responsibility of Franco. If the family and business structure had developed a balanced level of cohesion, the Rigatoni family might have been better positioned to defend against such crisis and diffused the irrational accusations introduced by Ferruccio as opposed to the Rigatoni family's enmeshed family system composition which Olson, et al. (1989) state is at an unbalanced level. This might have also enabled the Rigatoni family business to cope with the financial crisis in a more diligent and efficient manner, rather than turn to false accusations and amplify the stages of shock, denial, anger, depression and bargaining that Smith and Berger (1993) claim are the behavioral reactions associated among family business members during moments of financial crises. These amplified behavioral reactions associated with the Rigatoni family's unbalanced cohesive structure affirms Hypothesis 2a where family businesses with enmeshed levels of cohesion within the family system will hinder effective business unit performance during periods of financial crises.

The Rigatoni family business was unable to survive the financial crisis and reestablish itself as a dominant real estate development firm as a result of the crises and conflicts which had confronted them. Nicholson (2008) states that the need for flexibility in the allocation of roles and responsibilities can give the family firm a better chance at survival. Given the rigid family structure, the Rigatoni family was unable to adapt to the crises and allow for the other brothers to become involved in the decision-making process. Valerio and Felice had lacked such decision-making experiences and expertise as a result of Franco's rigid adoption of practices in roles within the family firm thereby putting the firm at risk for failure during this crisis. The original family structure did not prove to be what Nicholson (2008) termed an "annealing" advantage for family businesses over non-family business counterparts. A rigid sense of adaptability caused the Rigatoni family to divide itself during its most severe crisis when the unity of the family was needed most to weather and overcome the conflict presented to the family and the business at that time. This lack of adaptability within the Rigatoni family business which led to its dissolution provides factual support for Hypothesis 2b where family businesses with rigid levels of adaptability within the family system will hinder effective business unit performance during periods of financial crises. Similarly, strategic alliances succeed and fail (Lorange & Roos, 1991), but one can follow basic rules for making them succeed:

- Focus on how you and your partner will work together (not on defining your business);
- Develop metrics on performance (not just goals);
- Leverage differences to synergistically create value;
- Encourage collaborative behavior (not just formal systems and structures); and
- Be as diligent in managing your alliance, as you are in managing internal stakeholders (Hughes & Weiss, 2007).

The goal should be to recognize an alliance is an amalgamation of two or more different entities with different goals, different strategies, different cultures, all working together towards mutual effectiveness on a project. So, too, are family relationships.

Limitations, Implications, and Conclusion

Limitations of the study can be seen in that this is only a single case which examined a specific family system and its impact upon the firm during moments of crises. The research would be strengthened if several family firms with different family structures were examined during similar moments of crises or change so as to determine if Olson, et al.'s (1989) theoretical framework of family structure influenced and impacted the firm and its decision-making abilities. Future qualitative research should be developed in this comparative manner so as to (1) examine whether the family structure is the main contributing factor to the ever-present opportunity for conflict and tension within the family firm, and (2) reveal how different family structures deal with similar conflicts within the family firm. To ascertain the comparable effect of looking at strategic alliances relative to family relationships, more qualitative analysis and then quantitative research and analysis would be required, but the connections between the two are first made here.

The practical implication for this study allows for family firms, whose decisions are impacted by the constructs of the family, an opportunity to measure and examine any strengths or weaknesses that the family structure may contribute to the management, progress and survival of the family firm. A proactive approach in determining where the family structure lies, and developing a viable business plan around the family structure, may enable family firms to better weather moments of conflict or change than family firms who are not aware of the composition of or impact that the family structure has on the firm. This may be of vital importance to the success of the family business, given that most family businesses do not survive past the first or second generation.

The paper's main concept is to examine from a qualitative perspective Olson, et al.'s (1989) theoretical constructs of family cohesion and family adaptability as it related to and impacted the family firm. This qualitative approach was utilized to examine first-hand the interaction and impact that family structures have on influencing the family business during periods of crises. A qualitative approach to this type of situation allowed for the research to uncover the family dynamics and its influence on the firm during moments of crises which a quantitative study may not have been able to reveal.

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