Indian Journal of Economics and Business
Vol. 20 No. 4 (December, 2021)

http://www.ashwinanokha.com/IJEB.php

Does Mimicry Isomorphism Play a Role in Sustainable Development Operationalization: A Case of SMEs in Khyber Pakhtunkhwa

Dr. Naveed Hussain Shah[1]*, Dr. Muhammad Asad Khan[2],Waqar Khalid[3], Dr. Mahad Jehangir[4], Sher Rahman[5]

[1] *Assistant Professor, Department of Business and Management Sciences, University of Lakki Marwat, Khyber Pakhtunkhwa, Pakistan*
[2] *Assistant Professor, Department of Management Sciences, National University of Modern Languages, Peshawar, Khyber Pakhtunkhwa, Pakistan*
[3] *Ph.D. Scholar, Department of Economics, Near East University, Nicosia/TRNC, Cyprus*
[4] *Lecturer, Department of Business and Management Sciences, University of Lakki Marwat, Khyber Pakhtunkhwa, Pakistan*
[5] *M.Phil. Candidate, Department of Management Sciences, City University of Science & Information Technology, Peshawar, Pakistan*

**Corresponding author Email: naveedshah@ulm.edu.pk*

Received Date: 19th August, 2021
Revised Date: 23rd September, 2021
Acceptance Date: 25th November, 2021

Abstract: This study explores the impact of mimicry isomorphism on the operationalization of sustainable development among 242 small and medium-sized enterprises (SMEs) in Khyber Pakhtunkhwa, Pakistan. The study used self-administered questionnaires distributed to the surveyed enterprises, and a random sampling technique was applied to collect primary data. The primary methods of data analysis were exploratory factor analysis (EFA) using SPSS version 24 software, confirmatory factor analysis (CFA), and structural equation modelling (SEM) using AMOS version 24 software. The empirical findings of structural equation modelling showed that mimicry isomorphism significantly affects all three measured dimensions of sustainable development (i.e., social, economic, and environmental). Thus, the study provides strong evidence for operationalizing sustainable development through mimicry isomorphism.

Keywords: Sustainable development; Mimicry isomorphism; Structural equation modelling; SMEs; Pakistan.

Introduction

Sustainable development is a 21st century global agenda that challenges all businesses, particularly small and medium-sized enterprises (SMEs) (Sen, 2014). The United Nations Conference on the Human Environment (UNCHE) in 1972 led to a wave of targeted actions to reduce pollution (e.g., waste management, recycling, eco-innovation, and energy efficiency), as it was believed that without these measures, the earth would become uninhabitable (Messeni Petruzzelli, 2011; Borim-de-Souza *et al.,* 2015). In 1987, the Brundtland Commission published a report, entitled, *"Our Common Future"*, which defined sustainable development as follows: "sustainable development is development in the present that does not compromise the ability of future generations to meet their own needs" (Borim-de-Souza *et al.,* 2015). The recently adopted 2030 Agenda aims to express that sustainable development is more serious and compelling globally than ever before. After the Millennium Development Goals expired on January 1, 2016, the 2030 agenda for sustainable development was proclaimed at a UN summit (UNDG, 2015).

Theoretical and empirical research has shown that society and stakeholders increasingly prefer companies that actively address sustainable development principles (Gomes *et al.,* 2015). This is done through effective measures, e.g., reducing the company's carbon footprint, water consumption, community engagement, and improving education (McPhee, 2014). Therefore, companies should focus on changing their operations throughout the organization and finding effective ways to establish value for the company and the community (McPhee, 2014).There are various perspectives and considerations on the concept and phenomenon of sustainable development (Windolph *et al.,* 2014).Companies must go beyond visions and goals to operationalize sustainable development (Gomes *et al.,* 2015). To achieve sustainable development in business, social, economic, and environmental dimensions of sustainability must be considered (Perez-Batres *et al.,* 2011; Swanson & Zhang, 2012; Windolph *et al.,* 2014).

Scholars call for more research on the responsible factors underlying the phenomen on of sustainable development (Gstraunthaler, 2010).In the current study, isomorphism is defined as the interaction of small businesses with the environment and small businesses with other businesses within an organizational domain that leads to the unification of sustainable development. More specifically, isomorphism is a literary termthataddresseshowbusinessesgainlegitimacybyadheringtosocietalvaluesand social norms (Joseph & Taplin, 2012; Lin & Sheu, 2012).Therefore, isomorphism concentrates on the interface between business and the environment, recognizing that businesses rarely exist in a vacuum. As a result, isomorphism represents a complex interaction between environmental decisions and a company's willingness to adapt (Bartram, 2011).Isomorphism, then, describes the rationale for organizational configurations in similar environments (Bartram, 2011).

Thus, organizations must adapt to their normative environment to survive and achieve their goals. In this study, it is assumed that firms that interact with each other tend to influence the behavior and practices of the other firms in their social environment when they are isomorphic. Government agencies, regulators, and organized civil societies criticized corporations for their environmental degradation, prompting them to join the sustainable development movement (Gomes *et al.,* 2015). Because of their interconnectedness with society, corporations will eventually evolve towards similar behaviors and practices, according to the isomorphic process (Joseph & Taplin, 2000).In response to social change, social networks play an important role in assessing, responding, predicting, and adapting to global social and environmental change (Tilt, 2008). One example of such global change is sustainable development.

The remaining study proceeds as follows. Section 2 briefly reviews the literature, Section 3 highlights the theoretical frame work and hypothesis development, Section 4 outlines the methodology, Section 5 presents empirical findings, and Section 6 offers the discussion and policy implications.

1. Literature Review

The literature review of the current study is primarily based on two overarching concepts: isomorphism and sustainable development. The background studies first contextualize the concept of SMEs in Khyber Pakhtunkhwa, Pakistan. Mamman *et al.* (2015) explained that small enterprises in one country might be classified as medium or large.Zafar & Mustafa (2017) explained that SMEs are self-employed enterprises with less than 250 workers, an annual turnover of 250 million rupees, and a paid-up capital of 25 million rupees. This definition encompasses the entire economy and focuses on the behavior of SMEs, irrespective of sectoral differences.

In the literature, isomorphism is explained by two theories: the theory of institutional isomorphism and the theory of organizational ecology. According to the institutional isomorphism theory, enterprises of all types adapt their structures to those of their industry competitors (Tilt, 2008). Di Maggio & Powell (1983) assume that isomorphism results from coercion, mimetic, and normative pressures in a particular domain (Hannan & Freeman, 1977; Di Maggio & Powell, 1983; Joseph & Taplin, 2012). In contrast, organizational ecology theory provides the theoretical basis for competitive isomorphism, which states that firms under environmental pressure exhibit virtually identical characteristics. It is argued that firms facing similar environmental conditions tend to homogenize over time due to isomorphic pressure (Hannan & Freeman, 1977; Di Maggio & Powell, 1983). Isomorphism influences the internal practices of firms and social institutions in a given environment. Gstraunthaler (2010) explains that every company has an institutional environment consisting of structures, values, and processes that are traditional or conventional. Additionally, companies are entrenched in an external institutional environment. In this study, institutional isomorphism is examined both theoretically and empirically. Institutional isomorphism theory states that institutions provide permanence and meaning to social behavior through cognitive, normative, and regulatory structures (Biloslavo & Lynn, 2007). As a result of institutional isomorphism, a firm is under pressure from competing firms. Regulations, monitoring, and sanctions are examples of coercive pressures.

The regulatory forces that govern a business practice, such as sustainable development, arise from prevailing rules and laws (Joseph & Taplin, 2012). Businesses reinforce and disseminate behavioral norms in their interactions, creating normative pressures. Isomorphism is primarily driven by professionalization. The dynamic of professionalization is to define the terms and to give them a cognitive basis and legitimacy (Biloslavo & Lynn, 2007). Mimicry pressure occurs when organizations adopt the successful practices of their competitors. Isomorphic pressure occurs when one entity adapts to the behavior of another entity dealing with similar circumstances (Lin & Sheu, 2012; Joseph & Taplin, 2012). In this study, three types of mimicry isomorphism are examined.

1.1 Mimicry Isomorphism

Isomorphism is often explained in terms of mimicry, mimetics, or mimesis in institutional organization theory. Research on mimicry isomorphism within institutional theory has examined how it responds to environmental uncertainty (Beckert, 2010; González, 2010). Mimetic isomorphism suggests that organizations make convergent changes to legitimize themselves in institutional environments (Codagnone *et al.,* 2015). Institutional isomorphism occurs when organizations mimic their legal and successful counterparts to gain legitimacy (Hannan & Freeman, 1977; Di Maggio & Powell, 1983; Joseph & Taplin, 2012). Mimicry behavior occurs through a variety of mechanisms. In modelling,

companies recruit individual workers from other companies, hire consultants, and participate in industry associations (Wu *et al.,* 2013). Only successful organizations are imitated for legitimacy reasons if the values they represent are consistent with their goals (Beckert, 2010). Companies imitate other competing companies in the industry (Kshetri, 2009). Nevertheless, the imitated companies should be identical in complexity or pioneered. National cultures can emerge when identical companies are imitated in complexity or pioneered. In this regard, the legitimacy of mimicry isomorphism is cultural (Wahid & Sein, 2013).

To maintain competitiveness and minimize negative and unexpected outcomes, a company facing uncertainty tends to mimic other companies (Yang & Hyland, 2012). There are three forms of mimetic isomorphism: frequency-based imitation, property-based imitation, and outcome-based imitation (Biloslavo & Lynn, 2007; Kauppi, 2013; *Wu et al.,* 2013). First, mimetic isomorphism is purest in frequency-based imitation. It happens when a company mimics the structures and practices of its competitors (Biloslavo & Lynn, 2007; Wu *et al.,* 2013). Second, trait-based imitation is highly selective compared to frequency-based imitation. When companies only imitate companies that have certain characteristics like size and centrality, they practice trait-based imitation (Biloslavo & Lynn, 2007; Kauppi, 2013; Wu *et al.,* 2013). Using traits to imitate organizations means that organizations with certain traits apply decisions and practices that are usually and likely to lead to positive outcomes for imitators (Biloslavo & Lynn, 2007). Finally, outcome-based imitation involves the selective imitation of positive decisions and practices. Thus, outcome-oriented imitation refers to the imitation of successful actions (Wu *et al.,* 2013). More specifically, trait-based imitation assumes that companies exhibit certain desirable traits, whereas outcome-based imitation assumes that companies exhibit certain desirable outcomes. In the context of institutional theory, frequency-based and trait-based imitations are prevalent (Wu *et al.,* 2013). In the early stages of practice adoption, it is particularly important to use outcome-based imitation.

1.2 Sustainable Development

The second part of the literature review discusses sustainable development, anchored by three key dimensions: economic, social, and environmental. These three dimensions of sustainable development are discussed in more detail below.

1.2.1 Environmental Sustainability

The concept of environmental sustainability means preserving the integrity of soil, air and water resources from human activities. There are certain limits to the regenerative capacity of ecosystems (Høgevold *et al.,* 2015). Sustainable businesses strive to reduce their ecological footprint (Galpin *et al.,* 2015). Pollution control, pollution prevention, and product stewardship are three taxonomies that any company can use to reduce waste and emissions. Companies should use responsible waste disposal mechanisms to control pollution, such as setting up additional filtration facilities or outsourcing waste disposal. Pollution prevention also includes reducing waste in the production system by introducing innovative processes and technologies. Finally, product stewardship focuses on reducing resource consumption and toxic pollution and recycling. Environmental sustainability focuses on long-term well-being (Coffman & Umemoto, 2010). According to the European Commission, companies' most environmentally sustainable practices include recycling, energy efficiency, pollution reduction, and waste management (Turyakira *et al.,* 2014). Studies of SMEs conducted in European countries demonstrate that environmentally sustainable practices are generally associated with adopting environmentally friendly products, operational systems, and active participation in recycling (Oxborrow & Brindley, 2013). According to Danish SMEs, environmentally oriented corporate social responsibility activities enhance their reputation, impacting on their competitiveness (Turyakira *et al.,* 2014).

1.2.2 Economic Sustainability

The concept of economic sustainability results from the responsible production of various goods and services (Galpin *et al.,* 2015). The goal is to produce products that are in demand by customers, reduce input costs, and improve production efficiency. Therefore, technological and innovative elements also contribute to economic sustainability (Martinez-Conesa *et al.,* 2017). However, it is the least documented pillar of sustainable development. There must be more literature articulating and structuring the concept of economic sustainability. In the case of high-value creation, market conditions and regulations may limit the ability of the firm to create value (Bansal & Des Jardine, 2014). Economic sustainability, therefore, requires the theorization and exploration of various components.

The economic sustainability of a system leads to the continuous production of goods and services (Assefa & Frostell, 2007). For long-term economic growth, avoid sectoral imbalances that discourage industrial and agricultural production. It is challenging to sustain a sustainable competitive advantage via innovation in today's competitive environment. Competitive cycles lead to endless "me-too" products and differentiation strategies by competitors that are ultimately destructive (Wilson, 2015). SMEs are especially affected by the destructive nature of these reactive strategies. Companies committed to sustainable development invest less for short-term gains and more for long-term profits (Bansal & Des Jardine, 2014).

1.2.3 Social Sustainability

Small and large businesses need to consider social sustainability because they are highly dependent on their communities' well-being, stability, and success. A company's competitive position is influenced by its status as an employer, producer, and actor in its local community (Polášek, 2010). Consequently, companies that assume social responsibility can expect to be held in higher esteem by the public and the business community. This increases a company's chances of attracting capital and improving its competitiveness (Turyakira *et al.,* 2014). Most European countries support sports activities with the help of SMEs. Therefore, SMEs in Latin America are also heavily involved in sports, health, and culture (Turyakira *et al.,* 2014).

Social issues, stakeholder management, and environmental assessment contribute to social sustainability (Vallance *et al.,* 2011). In the environmental assessment, companies examine socioeconomic and environmental issues. Second, stakeholder management involves interaction with people and the environment outside the company. Value creation for stakeholders is distributed equitably. Finally, social management aims to avoid child labor, the production of socially undesirable products, and unethical activities (Marques *et al.,* 2010; James *et al.,* 2011). Demographic and cultural differences are important aspects of sustainable social development (Sen, 2014).

2. Theoretical Framework and Hypotheses Development

In the context of sustainable development, there are many visions and considerations from different areas of life (Windolph *et al.,* 2014). Organizations need to think beyond visions and goals and consider actions and behaviors that change their interactions with the external world to operationalize sustainable development (Gomes *et al.,* 2015). Sustainable development is primarily about implementing the social, economic, and environmental dimensions of sustainability (Perez-Batres *et al.,* 2011; Swanson, 2012; Windolph *et al.,* 2014).

Latent research and current literature on sustainable development have revealed several implementation problems. Empirical research has broken down sustainable development into social, economic, and environmental variables (Windolph *et al.,* 2014). Since sustainable development inherently needs the integration of economic, environmental, and social development, this gap is very large. An integrative approach is needed to operationalize and assess sustainable development. Few empirical studies have

examined all dimensions of sustainable development practices. A few empirical studies attempt to take a holistic approach to sustainable development (Aggarwal, 2013; Dos Santos *et al.*, 2013; Goyal *et al.*, 2013; Windolph *et al.*, 2014; Gomes *et al.*, 2015; Høgevold *et al.*, 2015).

In the empirical studies, especially on Pakistani SMEs, sustainable development practices are not clearly defined. In Pakistan, sustainability research primarily focuses on the accounting (i.e., sustainable reporting) perspective of sustainable development (Martínez-Ferrero & García-Sánchez, 2015; Massa *et al.*, 2015; Venkatraman & Nayak, 2015). This study focuses on sustainable processes and practices rather than the end product of a company's sustainability efforts. For example, sustainability reporting studies focus on how companies report on sustainability issues (Cheng & Yu, 2012; Martínez-Ferrero & García-Sánchez, 2015; Massa *et al.*, 2015; Venkatraman & Nayak, 2015). Similarly, this study examines how SMEs in Khyber Pakhtunkhwa, Pakistan, approach sustainability and what factors influence these practices. In this study, these two concepts are explored in depth. For this purpose, the following null hypotheses were formulated:

H_1: There is a positive significant association between perceived mimetic isomorphism and environmental sustainability practices of SMEs in Khyber Pakhtunkhwa.

H_2: There is a positive significant association between perceived mimetic isomorphism and economic sustainability practices of SMEs in Khyber Pakhtunkhwa.

H_3: There is a positive significant association between perceived mimetic isomorphism and social sustainability practices of SMEs in Khyber Pakhtunkhwa.

Figure 1 shows the concepts studied in the context of SMEs in Khyber Pakhtunkhwa, Pakistan.

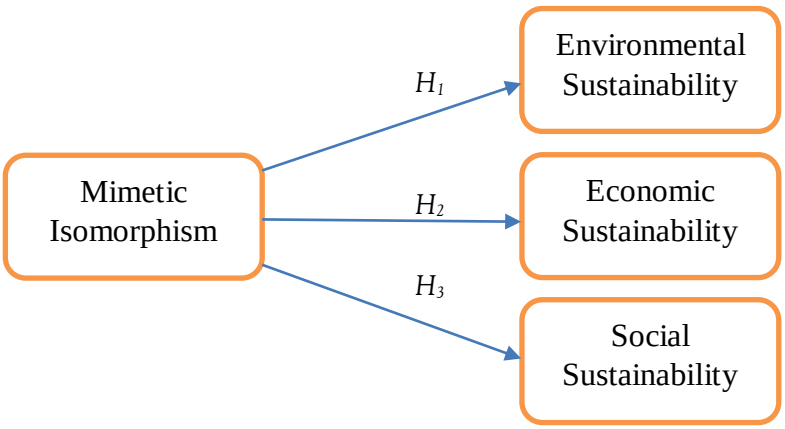

Figure 1: Theoretical Framework

3. Methodology

The research area proposed for the present study is Khyber Pakhtunkhwa, which includes 35 districts. SMEs are located in different districts of Khyber Pakhtunkhwa. However, Peshawar, Haripur, and Swat districts were selected because most SMEs are located in these districts and are, therefore, the focus of this research. This investigation is carried out under the epistemological viewpoint of positivism since it assumes that the social world is considered as something external and, as such, is considered objectively (Blumberg *et al.*, 2011).

400 questionnaires were distributed to the owners and managers of selected SMEs for data collection, with 260 returned and 140 missing, representing a response rate of 61.5%. Finally, 242 questionnaires were used for the empirical study after partial responses were sorted out, resulting in an effective response rate of 60.5 percent. As shown in Table 1, most respondents were male (92%), between 36

and 45 years old (36%), and owners (60%), while 40% were managers. In addition, most respondents had 7-20 employees (47%) and were located in rural areas (85%).

Table 1: Demographics details of respondents

Variables	Category	Frequency	Percentage (%)
Gender	Male	220	91.67
	Female	20	8.33
Age	Below 25 years	12	5.00
	25-35 years	37	15.42
	36-45 years	86	35.83
	46-55 years	65	27.08
	Above 55 years	40	16.67
Position in business	Manager	95	39.58
	Owner	145	60.42
# of employees	6 and below	16	6.67
	7-20	113	47.08
	21-30	86	35.83
	31-40	25	10.42
Location of business	Rural	203	84.58
	Urban	37	15.42

Source: *Data processed by the author (2022)*

4.1 Research Design

This cross-sectional study is based on quantitative research because longitudinal studies are more time-consuming, labor-intensive, and costly (Sekaran & Bougie, 2016). Quantitative research aims to provide numerical and statistical information about specific behaviors, opinions, and attitudes related to research objectives(Bradley, 2007).

4.2 Data Collection

The survey method was applied in this research study, and questionnaires were distributed in person and electronically. Both methods were convenient and effective. The questionnaire consisted of questions with a 5-point Likert scale, which were operationalized based on previous empirical studies. In this study, mimicry isomorphism was computed using various scales applied in previous empirical studies (Liang *et al.,* 2007; Liu *et al.,* 2010). Sustainable development has also been measured using various scales developed in other empirical studies (Gualandris *et al.,* 2014; Høgevold *et al.,* 2015; Venkatraman & Nayak, 2015; Adebanjo *et al.,* 2016). These scales have acceptable psychometric properties because their Cronbach's alpha values are greater than 0.7, which is greater than the 0.6 thresholds.

We used judgmental and random sampling methods to select SME managers and owners. Most SMEs in Khyber Pakhtunkhwa are not officially registered, which limits the ability to obtain a random sample. Small enterprises dominate in Khyber Pakhtunkhwa province, while there are relatively few large enterprises. In addition, 83.1% of Khyber Pakhtunkhwa's population lives in rural areas (PBS, 2019).

The Rao soft sample size calculator was used to calculate the sample size with a margin of error of 5 percent and a confidence level of 95 percent. The calculation result shows that a sample of 200 is a good sample for SEM to be effective. For a model with 4 latent variables, 50 to 70 is a sufficient sample size (Sideridis *et al.,* 2014). For a simple CFA with 4 indicators and loading of about 0.80, a sample of 30 observations is needed at SEM, while 450 cases are needed for a mediation analysis (Wolf *et al.,* 2013). Considering the non-response rate, a sample size of 242 was chosen for the study.

4.3 Data Analysis

Descriptive and inferential statistics were applied to analyze the sample data using SPSS version 24 software. Structural equation modelling (SEM) has been suggested for hypothesis testing in inferential analysis because of certain advantages. First, SEM is the multivariate technique that can replace multiple regression analysis. Second, SEM is the superior technique because it simultaneously tests a range of dependency relationships among variables (Cooper & Schindler, 2008). Furthermore, confirmatory factor analysis (AMOS version 24.0 software) was conducted because most of the scales in the study were adjusted.

4.4 Reliability and Validity

In the study, reliability was determined by Cronbach's coefficient alpha (α), average variance extracted (AVE), and composite reliability (CR). In contrast, validity means that differences in observed scale scores reflect actual differences between items rather than random or systematic errors. Our analysis computed convergent validity by factor loadings and AVE scores. In contrast, discriminant validity is measured by the difference between AVE and the variance and correlation matrix (Masocha & Fatoki, 2018).

4.5 Ethical Considerations

The reason for conducting this study was explained to the respondents. The data of the study were kept strictly confidential. In addition, participants were informed that their data would not be sold or shared with third parties. The authors properly cited all literature sources.

4. Empirical Results

Preliminary assessments of the collected data included screening for missing observations, outliers, and normality of the data as measured by measures of skewness and kurtosis, which led to the validity of the data as no significant anomalies were found.

4.1 Model Specification

In order to establish factor loadings, exploratory factor analysis (EFA) was performed. Table 2 shows the factor loading results, with all items having significant loadings above 0.50 (Mishra, 2015). Researchers use EFA when they are uncertain about the scale's dimensionality or need to determine if the observed variables are associated with any factors (Mahmoud &Khalifa, 2015). In this research, principal component analysis (PCA) was performed as the extraction method, and varimax rotation was applied due to the orthogonality of the data. Orthogonal rotation is used when the factors are not correlated, and 90° rotation is used when they are correlated (Cooper & Schindler, 2008; Yong & Pearce, 2013).

Table 2: Factor loadings, Average Variance Extraction, α, *CR* and R^2

Factor	Item	Factor loading	*AVE*	α	*CR*	R^2
Mimetic Isomorphism	Mim_Iso1	0.915	0.742	0.915	0.939	--
	Mim_Iso2	0.945				
	Mim_Iso3	0.892				
	Mim_Iso4	0.756				
	Mim_Iso5	0.791				
Economic Sustainability	Eco_Sus1	0.682	0.612	0.856	0.917	0.42
	Eco_Sus2	0.829				
	Eco_Sus3	0.867				
	Eco_Sus4	0.893				
	Eco_Sus5	0.912				

	Eco_Sus6	0.879				
Environmental Sustainability	Env_Sus1	0.834	0.832	0.923	0.937	0.45
	Env_Sus2	0.819				
	Env_Sus3	0.891				
	Env_Sus4	0.856				
	Env_Sus5	0.814				
	Env_Sus7	0.803				
	Env_Sus8	0.741				
Social Sustainability	Soc_Sus1	0.754	0.616	0.905	0.921	0.39
	Soc_Sus2	0.845				
	Soc_Sus3	0.864				
	Soc_Sus4	0.658				
	Soc_Sus5	0.867				
	Soc_Sus6	0.745				
	Soc_Sus7	0.712				

Source: *Data processed by the author (2022)*

Table 2 reports that Cronbach's alpha coefficient values ranged from 0.856 to 0.923, indicating significant reliability. The internal consistency is considered acceptable when the CR is above 0.7, preferably above 0.9, and the AVE is above 0.5 (Mishra, 2015). The resultsalso show that all values of CR & AVE are larger than the cut-off values, indicating internal consistency. Factor loadings above 0.70 are preferred for convergent validity scores (Mishra, 2015). Table 2 shows that all standardized factor loadings were above the threshold of 0.50, indicating good convergent validity. Discriminant validity was assessed using the correlation coefficients between the constructs and the average squared variance. Table 3 shows that all calculated correlation coefficients between the constructs were below 0.8.The discriminant validity of a theoretical operationalization is ensured when there is no high correlation between unique or distinguishable theoretical operationalizations (Sachdeva, 2011; Zikmund *et al.,* 2013; Ghauri *et al.,* 2020). Table 3 also shows that the square roots of the AVEs for each construct and the diagonal elements were all larger than the correlation coefficients for that construct.

Table 3: Descriptive statistics, discriminant analysis and inter-construct correlations

Items	Mean	St-Dev	Mim_Iso	Env-Sus	Eco_Sus	Soc_Sus
Mim_Iso	3.012	0.324	0.861	~~	~~	~~
Eco_Sus	2.892	0.043	0.71	0.782	~~	~~
Env_Sus	2.563	0.231	0.623	0.643	0.912	~~
Soc_Sus	3.492	0.145	0.537	0.579	0.642	0.785

Source: *Data processed by the author (2022)*

In the measurement model developed using CFA, reasonable fit was achieved (χ^2 = 306.503, *d.f* = 78, *p*-value = 0.000,*GFI* = 0.914, *NFI* = 0.952, *CFI* = 0.936, *TLI* = 0.957, *RFI* = 0.934, *AGFI* = 0.874,*RMR* = 0.044, *RMSEA* = 0.096, *SRMR* = 0.0456, and the $\chi^2/d.f$ = 3.929). The adjustment was satisfactory after removing one item (Env_Sub6) from the environmental sustainability construct because its residual values of 3.016 and 2.666 were greater than which were above the recommended cutoff of ±2.58 (Brynne, 2009).

4.2 Structural Equation Modelling

The structural equation modelling approach (SEM) was applied based on the study's theoretical model. The results show that the model was best fit because the χ^2 statistic was significant (χ^2= 573.17, *d.f* = 246, *p*-value = 0.000). As the background literature describes, the χ^2 statistic is susceptible to large

samples of over 200 observations (Sachdeva, 2011). The other diagnostic tests also confirm that the model is best fitted: *GFI* = 0.875, *NFI* = 0.928, *CFI* = 0.947, *TLI* = 0.932, *AGFI* = 0.821,*RMR* = 0.052, *RMSEA* = 0.082, *SRMR* = 0.048, *PNFI* = 0.722, $\chi^2/d.f$ = 2.33. In Figure 2, R^2shows the explained variation of the latent variable in the dependent variable. Furthermore, economic, environmental, and social sustainability had R^2 values of 0.39, 0.43, and 0.46, respectively, indicating adequate predictive ability.

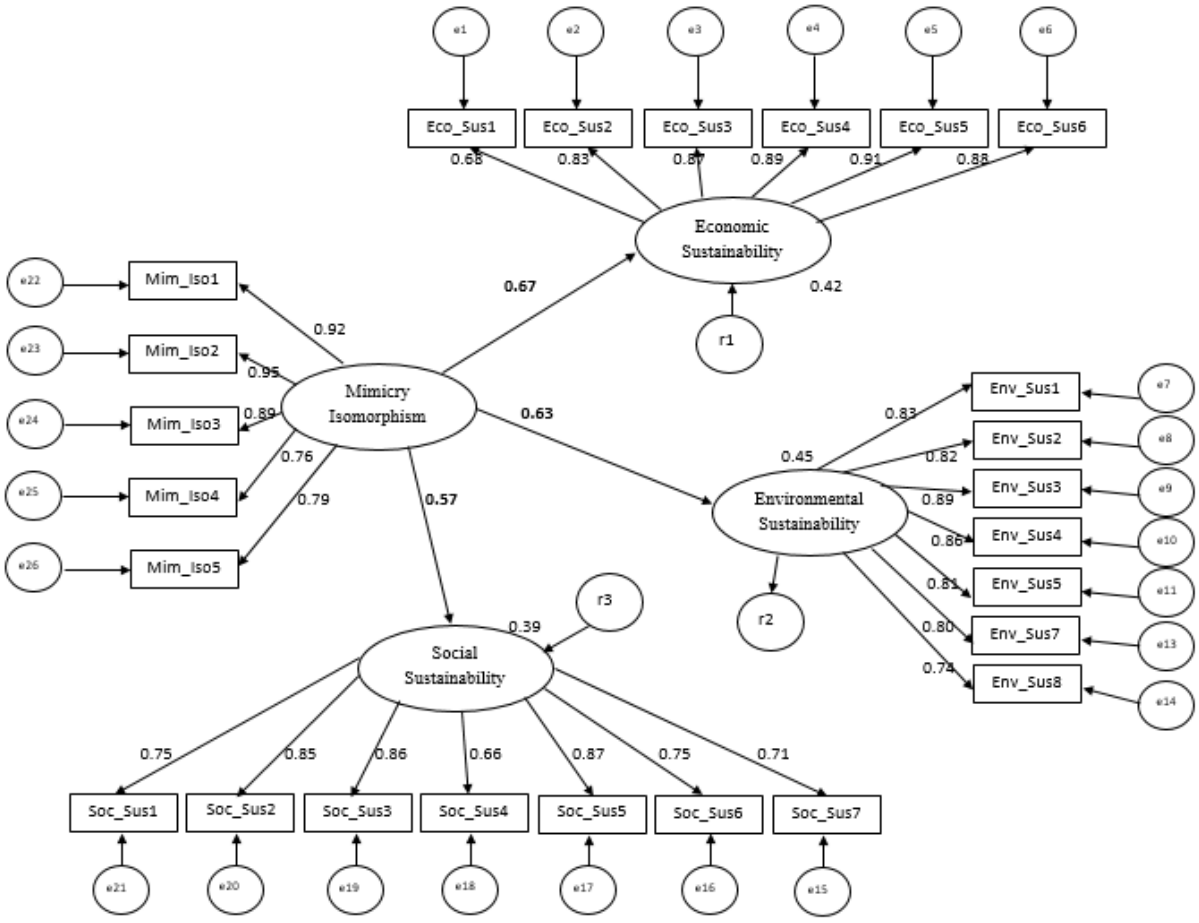

Figure 2: Diagram of SEM with standardized coefficients

The structural equation model (SEM) estimation findings are listed in Table 4 and Figure 2. Using standardized regression weights, the study found that all four latent variables in the structural equation model were statistically significant at the 1% significance level. Hence, mimetic isomorphism is positively and significantly associated with sustainability practices. Thus, $H_1$was supported for mimetic isomorphism vs. environmental sustainability (β = 0.67, p= 0.000), $H_2$was supported for mimetic isomorphism vs. economic sustainability (β = 0.64, p = 0.000),and $H_3$was supported for mimetic isomorphism vs. social sustainability (β = 0.56, p=0.000).

Table 4: Hypotheses testing outcomes using standardized coefficients

Hypotheses	β	S.E.	*p-value*	Rejected/Supported
Mimetic → Economic	0.67	0.073	0.0000*	Supported
Mimetic → Environmental	0.63	0.057	0.0000*	Supported
Mimetic → Social	0.57	0.051	0.0000*	Supported

Note: β= standardized regression coefficients; *S.E* = standard error; *p* = probability value; '*' shows significance at the 1% significance level.

Source: *Data processed by the author (2022)*

5. Conclusion and Policy Recommendations

This cross-sectional study examines the impact of mimetic isomorphism on sustainable development practices among 242 SMEs in Khyber Pakhtunkhwa, Pakistan. The study's empirical results confirm the positive and significant association between mimetic isomorphism and sustainable development practices in the selected enterprises of Khyber Pakhtunkhwa province. In particular, the path represented by H_2 in terms of mimetic isomorphism and economic sustainability (β = 0.67 &p = 0.000) was the strongest among all underlying relationships. Based on the obtained results, we can conclude that the perceived mimetic isomorphism and economic sustainability practices of SMEs in Khyber Pakhtunkhwa are positively and significantly related. Consequently, we accept our null hypothesis H_2in this study. This particular result is followed by the association between perceived mimetic isomorphism and environmental sustainability (i.e., β = 0.63 &p = 0.000). H_1also supported a positive and significant association between mimetic isomorphism and environmental sustainability in this study. Finally, the study's empirical results concluded that the association between mimicry isomorphism and social sustainability was positive and significant (β = 0.57 &p= 0.000); however, the magnitude of the relationship was the smallest among all underlying relationships. This means that H_3, the hypothesis of a positive and significant association between perceived mimetic pressure and social sustainability, was confirmed. Thus, considering the results obtained, we accept our null hypothesis H_3. The findings of our study support the outcomes of other empirical studies (Perez-Batres *et al.,* 2011; Masocha & Fatoki, 2018). In contrast, other studies (Jalaludin *et al.,* 2011; Jamil *et al.,* 2015)concluded that mimetic isomorphism has no relationship with environmental sustainability. This research concludes that the economic, social and environmental aspects of sustainability are important for SMEs as they imitate their competitors. Therefore, the extent to which SMEs incorporate sustainable development into their business practices is highly dependent on mimetic pressure. Small businesses may imitate large companies and their successful competitors on sustainability issues. Among the mimetic forces is the fear of going under and being excluded from society. It follows that SMEs that do not copy their competitors and large companies may have legitimacy problems. However, it is necessary to examine in which direction the isomorphism between the different categories of SMEs and the competing large firms is strongest.

The empirical results of this research have several policy implications. These findings will help governments and other sustainability stakeholders develop policies to encourage sustainable practices in SMEs. Policies to promote sustainability practices have recently been the subject of heated debate. Knowledge of the impact of mimicry isomorphism on sustainable development practices can be used to develop procedures and practices that indirectly sustainability adoption. Governments around the world, for example, can setup programs to reward companies that practice sustainability. This research shows that SMEs tend to copy such companies due to the strong forces of mimicry isomorphism.

Therefore, the benefits associated with SMEs' sustainability practices need to be publicized; this will automatically lead to the spread of sustainability practices due to the supporting forces of mimicry isomorphism. Furthermore, the results show that SMEs are more involved in sustainability practices the more the pressure to imitate is pronounced. Thus, SME strategies and policies can be expected to be homogeneous to some degree, with serious implications for those that do not comply. For example, sustainability requirements for companies are becoming more stringent, and rules and regulations are constantly evolving. Therefore, this study considers the mimetic isomorphism and sustainable development model as a competitive advantage and analytical tool. Consequently, SME owners or managers should proactively consider the two overarching concepts studied and avoid passive approaches to sustainability. The results of this study are an important warning sign for SME managers and owners who need clearer concepts and practices for sustainability. In conjunction with the increasing calls for sustainability voiced by various stakeholders, the study found a great deal of momentum and change towards sustainability within SMEs. Therefore, individual companies need to monitor the development of sustainability in order not to be left behind. The research discovered two distinct companies in mimicry isomorphism and sustainability. These are companies that are emulated as well as those that set the pace. Companies that do not take either of these stances will struggle as sustainability rewrites business rules. Finally, by understanding the relationship between mimetic isomorphism and sustainable development, governments, policymakers, and environmental stakeholders can promote policies and strategies that foster the diffusion of sustainable development in SMEs.

The instrumentality of SMEs combined with the renaissance of sustainability, especially in developing countries, makes SME knowledge a critical factor for economic growth. SMEs' management and success should not be left to chance. Therefore, this research makes an important contribution to the theory and knowledge of SMEs and sustainability practices urgently needed in today's world. Management theory is facing a new platform that requires reviewing and revisioning of approaches and strategies for business survival and growth. In the past, the economic goal of businesses was to make profits, but the results of studies of this type show that the business world has changed. Thus, this research contributes to the sustainability theory by confirming that SMEs must adopt business strategies to survive and thrive in today's competitive business environment. However, there is still a research gap in the literature that needs to be explored.

Future research should address the impact of this positive and significant relationship between mimetic isomorphism and sustainability practices on SME performance. Moreover, this research concentrated only on Khyber Pakhtunkhwa province, so the target area should be expanded to generalize the empirical results in a broader context. Finally, future studies should focus on the three dimensions of mimicry isomorphism identified in this study and examine their implications for operationalizing sustainable development.

References

Adebanjo, D., Teh, P. L., & Ahmed, P. K. (2016). The impact of external pressure and sustainable management practices on manufacturing performance and environmental outcomes. *International Journal of Operations & Production Management*, 36, 995-1013.

Aggarwal, P. (2013). Impact of sustainability performance of company on its financial performance: A study of listed Indian companies. *Global Journal of Management and Business Research (C: Finance), 13*, 60-70.

Assefa, G., & Frostell, B. (2007). Social sustainability and social acceptance in technology assessment: A case study of energy technologies. *Technology in Society*, *29*(1), 63-78.

Bansal, P., & DesJardine, M. R. (2014). Business sustainability: It is about time. *Strategic Organization*, *12*(1), 70-78.

Bartram, T. (2011). Employee management systems and organizational contexts: a population ecology approach. *Management Research Review*, *34*, 663-677.

Beckert, J. (2010). Institutional isomorphism revisited: Convergence and divergence in institutional change. *Sociological Theory*, *28*(2), 150-166.

Blumberg, B., Cooper, D.R., & Schindler, P.S. (2011). *Business Research Methods (3rd Ed.)* McGraw-Hill: New York, NY, USA, 17–194.

Borim-de-Souza, R., Balbinot, Z., Travis, E. F., Munck, L., & Takahashi, A. R. W. (2015). Sustainable development and sustainability as study objects for comparative management theory: proposing styles of reasoning for an unknown metropole. *Cross Cultural Management*, *22*, 201-235.

Bradley, N. (2007). *Marketing Research Tools and Techniques*; Oxford University Press: New York, NY, USA, 278–309.

Brynne, B. (2009). Structural equation modeling with AMOS: Basic Concepts, Applications, and Programming (2nd Ed.). Taylor and Francis Group, LLC: New York, NY, USA.

Cheng, H. L., & Yu, C. M. (2012). Adoption of practices by subsidiaries and institutional interaction within internationalised small-and medium-sized enterprises. *Management International Review*, *52*(1), 81-105.

Codagnone, C., Misuraca, G., Savoldelli, A., & Lupiañez-Villanueva, F. (2015). Institutional isomorphism, policy networks, and the analytical depreciation of measurement indicators: The case of the EU e-government benchmarking. *Telecommunications Policy*, *39*(3-4), 305-319.

Coffman, M., & Umemoto, K. (2010). The triple-bottom-line: framing of trade-offs in sustainability planning practice. *Environment, Development and Sustainability*, *12*(5), 597-610.

Cooper, D. R., Schindler, P. S., & Sun, J. (2006). *Business Research Methods*, 9, 1-744. New York: Mcgraw-Hill Company, USA.

Di Maggio, P.J., & Powell, W.W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organisational Fields. *American Sociological Review,* 48, 147–160.

Dos Santos, M. A., Svensson, G., & Padin, C. (2013). Indicators of sustainable business practices: Woolworths in South Africa. *Supply Chain Management: An International Journal*, *18*(1), 104-108.

Galpin, T., Whitttington, J. L., & Bell, G. (2015). Is your sustainability strategy sustainable? Creating a culture of sustainability. *Corporate Governance*, 15, 1-17.

Garg, P., & Chauhan, A. (2015). Factors affecting the ERP implementation in Indian retail sector: A structural equation modelling approach. *Benchmarking: An International Journal*, 22, 1315-1340.

Ghauri, P., & Grønhaug, K. (2010). *Research Methods in Business Studies*, 4th ed. Prentice Hall Financial Times: London, UK, 81–194.

Gomes, C. M., Kneipp, J. M., Kruglianskas, I., da Rosa, L. A. B., & Bichueti, R. S. (2015). Management for sustainability: An analysis of the key practices according to the business size. *Ecological Indicators*, *52*, 116-127.

González, J. M. G. (2010). Determinants of socially responsible corporate behaviours in the Spanish electricity sector. *Social Responsibility Journal*, 6, 386-403.

Goyal, P., Rahman, Z., & Kazmi, A. A. (2013). Corporate sustainability performance and firm performance research: Literature review and future research agenda. *Management Decision*, 51, 361-379.

Gstraunthaler, T. (2010). The business of business incubators: An institutional analysis–evidence from Lithuania. *Baltic Journal of Management*, *5*, 397-421.

Gualandris, J., Golini, R., & Kalchschmidt, M. (2014). Do supply management and global sourcing matter for firm sustainability performance? An international study. *Supply Chain Management: An International Journal*, 19, 258-274.

Hannan, M. T., & Freeman, J. (1977). The population ecology of organizations. *American Journal of Sociology*, *82*(5), 929-964.

Høgevold, N. M., Svensson, G., Klopper, H. B., Wagner, B., Valera, J. C. S., Padin, C., & Petzer, D. (2015). A triple bottom line construct and reasons for implementing sustainable business practices in companies and their business networks. *Corporate Governance*, 15, 427-443.

Jalaludin, D., Sulaiman, M., & Ahmad, N. N. N. (2011). Understanding environmental management accounting (EMA) adoption: a new institutional sociology perspective. *Social Responsibility Journal*, 7, 540-557.

Jamil, C. Z. M., Mohamed, R., Muhammad, F., & Ali, A. (2015). Environmental management accounting practices in small medium manufacturing firms. *Procedia-Social and Behavioral Sciences*, *172*, 619-626.

Jämsä, P., Tähtinen, J., Ryan, A., & Pallari, M. (2011). Sustainable SMEs network utilization: the case of food enterprises. *Journal of Small Business and Enterprise Development*, 18, 141-156.

Joseph, C., & Taplin, R. (2012). Local government website sustainability reporting: a mimicry perspective. *Social Responsibility Journal*, *8*, 363-372.

Kauppi, K. (2013). Extending the use of institutional theory in operations and supply chain management research: Review and research suggestions. *International Journal of Operations & Production Management*, 33, 1318-1345.

Kshetri, N. (2009). The development of market orientation: a consideration of institutional influence in China. *Asia Pacific Journal of Marketing and Logistics*, *2*, 19-40.

Liang, H., Saraf, N., Hu, Q., & Xue, Y. (2007). Assimilation of enterprise systems: the effect of institutional pressures and the mediating role of top management. *MIS Quarterly*, 31, 59-87.

Lin, R. J., & Sheu, C. (2012). Why do firms adopt/implement green practices?–an institutional theory perspective. *Procedia-Social and Behavioral Sciences*, *57*, 533-540.

Liu, H., Ke, W., Wei, K. K., Gu, J., & Chen, H. (2010). The role of institutional pressures and organizational culture in the firm's intention to adopt internet-enabled supply chain management systems. *Journal of Operations Management*, *28*(5), 372-384.

Mahmoud, A. B., & Khalifa, B. (2015). A confirmatory factor analysis for SERVPERF instrument based on a sample of students from Syrian universities. *Education+ Training*, 57, 343-359.

Mamman, A., Kanu, A.M., Alharbi, A., & Baydoun, N. (2015). Sized Enterprises (SMEs) and Poverty Reduction in Africa: Strategic Management Perspective; *Cambridge Scholars Publishing: Newcastle, UK*, 12–13.

Marques, F., Mendonça, P. S. M., & Jabbour, C. J. C. (2010). Social dimension of sustainability in retail: case studies of small and medium Brazilian supermarkets. *Social Responsibility Journal*, 6, 237-251.

Martinez-Conesa, I., Soto-Acosta, P., & Palacios-Manzano, M. (2017). Corporate social responsibility and its effect on innovation and firm performance: An empirical research in SMEs. *Journal of Cleaner Production*, *142*, 2374-2383.

Martínez-Ferrero, J., & García-Sánchez, I. M. (2015). Is corporate social responsibility an entrenchment strategy? Evidence in stakeholder protection environments. *Review of Managerial Science*, *9*(1), 89-114.

Masocha, R., & Fatoki, O. (2018). The Role of Mimicry Isomorphism in Sustainable Development Operationalisation by SMEs in South Africa. *Sustainability*, *10*(4), 1264.

Massa, L., Farneti, F., & Scappini, B. (2015). Developing a sustainability report in a small to medium enterprise: process and consequences. *Meditari Accountancy Research*, 23, 62-91.

McPhee, W. (2014). A new sustainability model: engaging the entire firm. *Journal of Business Strategy*, *35*, 4-12.

Messeni Petruzzelli, A., Maria Dangelico, R., Rotolo, D., & Albino, V. (2011). Organizational factors and technological features in the development of green innovations: Evidence from patent analysis. *Innovation*, *13*(3), 291-310.

Oxborrow, L., & Brindley, C. (2013). Adoption of "eco-advantage" by SMEs: Emerging opportunities and constraints. *European Journal of Innovation Management*, 16, 355-375.

PBS (2019). Area, Population, Density and Urban/Rural Proportion. Pakistan Bureau of Statistics, Government of Pakistan, Pakistan.

Perez-Batres, L. A., Miller, V. V., & Pisani, M. J. (2011). Institutionalizing sustainability: an empirical study of corporate registration and commitment to the United Nations global compact guidelines. *Journal of Cleaner Production*, *19*(8), 843-851.

Polášek, D. (2010).*Corporate Social Responsibility in Small and Medium-Sized Companies in the Czech Republic.* Ph.D. Thesis, Czech Management Institute, Praha, Czech Republic.

Roberto, B., & Monty, L. (2007). Mission statements in Slovene enterprises. *Management Decision*, *45*(4), 773-788.

Sachdeva, J.K. (2013). *Business Research Methodology*; Himalaya Publishing House: Mumbai, India, 69–205.

Sekaran, U., Bougie, R. (2009). *Research Methods for Business: A Skill Building Approach*, 5th Ed., John Wiley & Sons Ltd.: West Sussex, UK, 103–327.

Sen, S. K. (2014). Symbiotic linkage of sustainability, development and differentiation. *Competitiveness Review*, *24*(2), 95-106.

Sideridis, G., Simos, P., Papanicolaou, A., & Fletcher, J. (2014). Using structural equation modeling to assess functional connectivity in the brain: Power and sample size considerations. *Educational and Psychological Measurement*, *74*(5), 733-758.

Swanson, L. A., & Zhang, D. D. (2012). Perspectives on corporate responsibility and sustainable development. *Management of Environmental Quality: An International Journal, 23*, 30–639.

Tilt, C. A. (2008). Social learning, social networks and the SEA community. In *7th Australasian Conference for Social and Environmental Accounting Research, Adelaide, Australia*, 7-9.

Turyakira, P., Venter, E., & Smith, E. (2014). The impact of corporate social responsibility factors on the competitiveness of small and medium-sized enterprises. *South African Journal of Economic and Management Sciences*, *17*(2), 157-172.

United Nations Development Group (UNDG) (2015). Mainstreaming the 2030 Agenda for Sustainable Development. Retrieved fromhttps://sustainabledevelopment.un.org.

Vallance, S., Perkins, H. C., & Dixon, J. E. (2011). What is social sustainability? A clarification of concepts. *Geoforum*, *42*(3), 342-348.

Venkatraman, S., & Nayak, R. R. (2015). Corporate sustainability: An IS approach for integrating triple bottom line elements. *Social Responsibility Journal*, 11, 482-501.

Wahid, F., & Sein, M. K. (2013). Institutional entrepreneurs: The driving force in institutionalization of public systems in developing countries. *Transforming Government: People, Process and Policy*, 7, 76-92.

Wilson, J. P. (2015). The triple bottom line: Undertaking an economic, social, and environmental retail sustainability strategy. *International Journal of Retail & Distribution Management*, 43, 432-447.

Windolph, S. E., Schaltegger, S., & Herzig, C. (2014). Implementing corporate sustainability: What drives the application of sustainability management tools in Germany?. *Sustainability Accounting, Management and Policy Journal*, *5*, 378-404.

Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample size requirements for structural equation models: An evaluation of power, bias, and solution propriety. *Educational and Psychological Measurement*, 73(6), 913-934.

Wu, T., Daniel, E. M., Hinton, M., & Quintas, P. (2013a). Isomorphic mechanisms in manufacturing supply chains: a comparison of indigenous Chinese firms and foreign-owned MNCs. *Supply Chain Management: An International Journal*, 18, 161-177.

Yang, M., & Hyland, M. (2012). Re-examining mimetic isomorphism: Similarity in mergers and acquisitions in the financial service industry. *Management Decision*, 50, 1076-1095.

Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2), 79-94.

Zafar, A., & Mustafa, S. (2017). SMEs and its role in economic and socio-economic development of Pakistan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 6(4), 1-16.

Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2010). Business Research Methods (8th Ed.), South Western. *Cengage Learning*, 308-594.