

Impact of Corporate Reputation on Brand Segmentation Strategy: An Empirical Study from Iranian Pharmaceutical Companies

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Abstract

The impact of corporate reputation uses, including value creation, corporate communication, and strategic resources on branding strategies such as segmentation and producing intangible assets for different industries is investigated in western countries in the past few years, but there is a gap for the generalizability of findings to countries out of the United States and Europe. To establish the western researcher's external validity of theories in other countries and to obtain a better understanding of the influences of branding and corporate reputation in pharmaceutical business markets, the researchers applied this study for Iran, as a country in the Middle East. The obtained results using SEM (by P.L.S. 2.0 software) showed a weak relation between value creation and brand segmentation ($\beta = 0.07$ and $t\text{-value} = 1.806$) and no significant relation between corporate communication and strategic resources with brand segmentation ($\beta = 0.199$ and $t\text{-value} = 1.301$) and ($\beta = 0.146$ and $t\text{-value} = 1.465$). Based on these findings; and previous researches in this field, it seems that pharmaceutical managers and marketers need to change their thoughts and practices regarding segmentation and reputation. This study is a pioneering attempt in Iran to evaluate the impact of corporate reputation on brand segmentation strategy.

Keywords: Brand, Corporate Communication, Corporate Reputation, Segmentation, Strategic Resource, Value Creation.

1. Introduction

Corporate reputation can be a key contributor to an organization's success and its

relation to branding strategies such as brand segmentation or positioning has attracted considerable interest among managers,

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consultants and academics. In a society where markets are saturated with competing products, and consumers continue to grow in influence, corporate reputation becomes a crucial consideration for many firms. A survey by Capozzi (2005) indicates that almost 75% of CEOs showed concern about maintaining their company's reputation [1]. This statistic is not surprising in regard to significant tangible and intangible benefits that a strong reputation provides for an organization.

In the pharmaceutical industry, branding strategies such as segmentation, differentiation, and positioning mainly influence a doctor's perception of a product [2]. However, the basic to understand a company also helps customers in their decisions. The information a company sends on itself has an influential and unexpected impact on consumers' perception. The signals sent by a firm through its branding strategies, reputation, and product price are usually interpreted differently by its customers. Pharmaceutical industry as a whole and the companies, operating within the industry has faced many reputational challenges throughout their history. Determining appropriate drug pricing, a unique industry structure, an ever-

changing and critical political environment, potentially harmful features of products and brand myopia are only some of the difficulties that pharmaceutical companies face due to the nature of their industry. As a result, this is a sector where building and maintaining a superior corporate reputation and corporate brand are particularly difficult, and highly important. Therefore, understanding the fact that how managers use their corporate reputation to establish a firm's brand image strategy including segmentation strategies is indispensable [3, 4].

Several researches and studies have related the concept of brand segmentation to a firm's corporate reputation. Ghose et al. (2006) suggested that several dimensions of reputation, including packaging, responding to problems, customer service, delivery and product-specific comments, present the principle points that customers seek in their purchases [5].

Market segmentation and targeting are equally important to decide upon the promotional strategy of the company and to establish the reputation of the brand in customers' minds, since for every segment, customers need will be different, therefore, the strategy and product positioning are also different.

Pharmaceutical segmentation and customer targeting are essential even for low level of every business. To target doctors effectively, marketing and sales department analyze and segment the doctors by carrying retail chemist prescription audit to understand the potential of doctors, their prescription habit, and

frequency of prescription as well as their qualification. By segmenting customers properly, sellers can focus on the core customers and thus, the sale will increase [6].

The perceived value of brand and market segmentation in the pharmaceutical industry has been explored by MacLennan and Mackenzie (2000). As part of a wider survey, senior marketing executives were asked to gauge their view of the role and practice of market segmentation within their company [7]. All these key players recognized the value of strategic segmentation in the pre-launch phase and beyond (Figure 1).

Successful brand development (aka ‘marketing’) depends on a solid understanding of market segmentation. Many would say that effective strategic segmentation lies at the heart of strategic marketing process; indeed it should be the first step whether the purpose is to develop a portfolio presence in a therapy area, or to develop a specific brand (Figure 2).

Pharmaceuticals similar to other organizations are encouraged to develop a good corporate reputation for their quality of products [9, 10], for innovativeness [9, 11, 12], for honest communication and for environmental responsibilities [9]. In turn, these factors can be also converted subconsciously into the brand segmentation of the products belonging to the company [13, 14].

Since a firm’s corporate reputation tends to influence the initiation of a brand strategy decisions and brand scene-setting in pharmaceutical companies highly [15] and many organizations and companies use corporate reputation as an important resource to develop their strategic value or as a signal or trait to forecast their potential behavior, we, in this paper aim to develop an integrated model, which explicitly accounts for the influences of brand segmentation and company reputation on business customers’

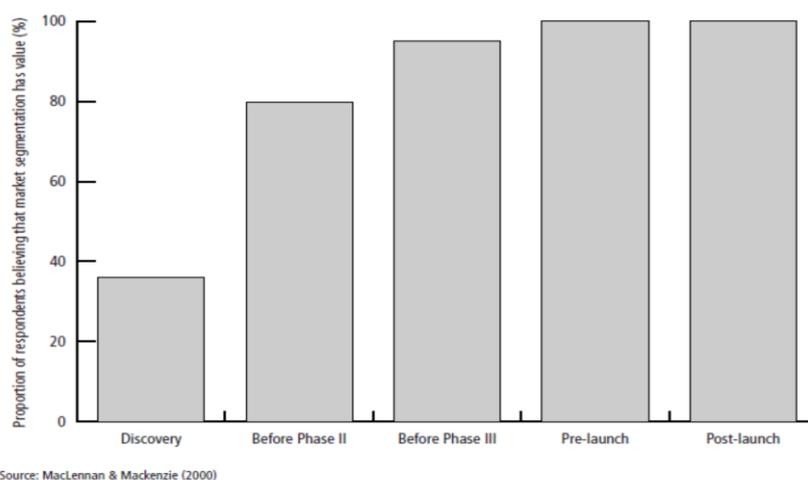


Figure 1. Extent to which senior healthcare executives agreed that market segmentation has value at each of five stages of the product life cycle [8].

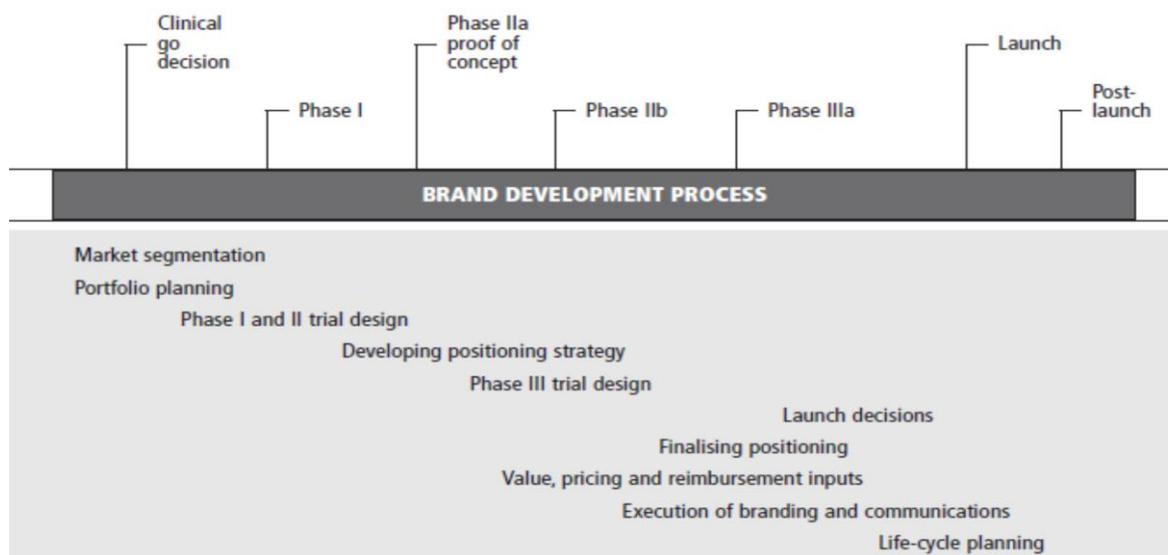


Figure 2. Representation of how market segmentation should provide direction across the whole brand development process, and why it is the key first step.

perception in the Iranian Pharmaceutical manufacturing Companies .

2. Materials and Methods

2.1. Literature Review

2.1.1. Corporate Reputation

Corporate reputation has become a “hot” topic in the past few years given the evidence linking it to various tangible and intangible benefits [16], while interest in the concept of corporate reputation has gained momentum in the last few years [17]. Several definitions purporting to explain the concept of corporate reputation have been offered by various authors [18].

Reputation scholars Charles Fombrun and Cees van Riel were the first to call on the industry for a common definition of reputation. They described six different perspectives on reputation (economic, strategic, marketing, organizational, sociological and accounting) and, drawing on

all six, propose their own multi-disciplinary definition. They maintain that a corporate reputation is a collective representation of a firm’s past actions and results that describes its ability to deliver valued outcomes to multiple stakeholders. Their integrative perspective presents reputation as the net result of the aggregation of these perceptions: ‘*A corporate reputation is a collective representation ... It gauges a firm’s relative standing both internally with employees and externally with its stakeholders...*’ [19].

Weigelt and Camerer (1988) have presented a definition of corporate reputation in strategic management that is cited in many cases. They asserted that corporate reputation is an attribute or a set of attributes ascribed to a firm and inferred from the firm’s past actions. It is the belief of market participants concerning a firm’s strategic character [20]. Roberts and Dowling (2002) contend that corporate reputation is the public’s cumulative

judgment of firms over time [21]. Some other researchers have discussed corporate reputation as a history of customer perception regarding the firm, such as collective beliefs that exist in the organizational field on a firm's identity and prominence [22, 23].

Davies (2003) suggests that corporate reputation enables firms to attract customers repeatedly [24]. Ferris (2003) also, points out that positive reputation encourages customers to trust in a seller and increases consumer's commitment [25].

Doorley and Garcia, in their book *Reputation Management*, adopt a different approach to define reputation [26]. They acknowledge that reputation is the aggregation of the perceptions and images that various stakeholders have concerning a firm, but they do not stop here. They refer to the very core of what creates these images, defining reputation with a simple formula:

$$\text{Reputation} = \text{Sum of Images} = (\text{Performance and Behavior}) + \text{Communication}$$

Kimberly Goldstein (2010) defined reputation as the sum of all of an organization's past and present performance or behavior and communication [27]. In other words, reputation equals performance and behavior plus communication over time.

$$\text{Reputation} = \sum \text{over time Sum of Images} = \sum \text{over time} [(\text{performance and behavior}) + \text{communication}]$$

Therefore, what are the use and benefit of corporate reputation for different firms and organizations like pharmaceuticals?

A good corporate reputation offers multiple benefits and usages to a firm, such as the

ability to withstand occasional adverse publicity [28], higher levels of customer purchase intention [29], strong organizational identification among employees and attracting and retaining better employees [30], better attitudes towards companies' salespeople and products on the part of industrial purchasers [31], customer loyalty [32], attracting investors [26], and greater competitive advantage [12, 24].

The review of theoretical literature indicates that the uses of corporate reputation could be theorized along six dominant paradigmatic perspectives, namely: public relations, marketing, management, economic, sociological, and also accounting [2, 13], which have a strong overlap in different business organizations.

Chen-Chu Chen, (2011) presented a synthesis to reduce these overlaps and categorized the uses of corporate reputation into three groups [2]: value creation (a tool for creating value), strategic resources (influencing competitor's actions/strategies), and corporate communication (developing the relationship with stakeholders).

*Value Creation*_ Dolphin (2004) is the most important study in this field. He suggests that corporate reputation is a value-creating tool [33], which has a positive influence on firm's value [28, 34, 35]. A similar argument is presented under the perspective of accounting. Moerman and Laan (2006) maintain that corporate reputation is used and presented to stakeholders as a corporate valuable [36] or as an intangible asset creating value in the future [37]. Similarly, Shkolnikov

et al. (2004) state that corporate reputation is used as a value-creating mechanism [38].

*Strategic Resources*_ Many scholars assert that corporate reputation can influence competitor's actions and strategies, thus it can be used as a strategic resource [20, 21]. Fombrun and van Riel, (2004) suggested that firms use corporate reputation to create a distinctive position in stakeholder's mind [39] and therefore can attain competitive advantage, which is a part of strategic resource [9, 40].

Many scholars also argue that corporate reputation is often deployed by firms as a helpful signal that provides stakeholders a good insight into the future of a firm and may be used as a signal that enables key resource providers such as banks and other financial institutions to interpret a company's initiatives from its past actions and assess its ability to deliver value outcomes. All of these can be used by firms as a strategic resource [41, 42, 43].

Corporate Communication _It is one of the corporate reputations uses, which develops the relationship with stakeholders including internal and external stakeholders. Lerbinger, (1965) and Grunig et al. (1992) argued that corporate reputation is used to communicate a firm's social responsibility activities with stakeholders within the business environment [44, 45].

Stanwick and Stanwick, (1998) have also been highly vocal concerning the positioning of corporate reputation, which enhances the generation of better feedback from stakeholders within the business environment

[46]. Fombrun and Shanly, (1990) indicate that a firm's previous corporate reputation can enhance its future reputation among customers.

Management scholars [47] suggest that a firm's corporate reputation commonly shapes the opinions and perceptions of shareholders as well as stakeholders. Puente et al. (2007) argue that a firm's corporate reputation signals or enables businesses to predict human behavior in the future [48].

2.1.2. Brand and Brand Segmentation

Keller (1998) expresses that a brand is a set of mental associations, held by the consumer, which add to the perceived value of a product or service [49]. These associations should be unique (exclusivity), strong (saliency) and positive (desirable).

Kotler, Adam, Brown and Armstrong (2003) defined brand as a "name, term, sign, symbol or design, or a combination of these, intended to identify the goods or services of one seller or group of sellers to differentiate them from those of competitors" [50]. AMA (2008) redefined "brand" as "name, term, design, symbol or any other feature that identifies one seller's goods or services as distinct from those of the other sellers [51]. A brand may identify one item, a family of items or all items of those sellers. If used for the firm as a whole, the preferred term is trade name.

Brands include both intangible and tangible benefits to the manufacturers and consumer, which help to differentiate companies and products [52]. To create useful and valuable brands including corporate or product brands,

manufacturers have to use different strategies to position their brands. One of these strategies is segmentation.

Segmentation is a key concept of transactional marketing: recognizing that transactions are facilitated when expectations are higher, and the mass market has been segmented into groups, or types with similar expectations. Then, brands could be profiled and created to meet each set of expectations. In traditional marketing, segmentation is aimed at maximizing the value created by the brand or company for its customers. In relationship marketing, segmentation is based on the value a customer brings to the company so that: only profitable customers should receive repeated attention [51].

Kathryn Greengrove (2002) argues that segmentation is a view that all customers are not the same. Thus, markets consist of a number of 'segments', each segment consisting of 'homogeneous' customers. There are two main segmentation approaches: needs-based and characteristics-based. *Needs-based segmentation* is based on customer s' needs. It is the process of segmenting the market based on understanding the needs of end users. This is the understanding that drives product development and brand strategy. It is fundamentally a strategic process (market segmentation), therefore should come first. By contrast, *characteristics-based segmentation* is based on the characteristics of customers and area. It is the process of segmenting customers based on their characteristics, attitudes or behavior. This process helps to drive the development and execution of customer

strategy and targeting (which customers should be targeted and how they can be accessed). This is a more tactical process and comes later [7].

Alessandro Montejo (2013) says that different companies and organizations need to segment their markets to find the most efficient way to allocate their limited resources and maximize marketing efforts. He also asserts that owing to the importance of segmenting brands and markets, different authors have focused their efforts on generating specific segmentation models.

Michael Lynn (2007) argued that STP marketing (segmentation, targeting, positioning) within broad types of a product category should result in competing brands having different customer profiles (called brand segmentation). However, there is little published evidence that such brand segmentation exists for any industry [53]. He also maintains that in classic segmentation there is more than one way to segment a market. You may differentiate your customers on the basis of demographic variables (such as age, gender, education, and income), geographic variables (such as nation, state, region, and neighborhood type), psychographic variables (such as attitudes, opinions, interests, and values), and behaviors (such as media habits, purchase frequency, brand loyalty, and channel usage) [54].

Laforet (2011) identifies segmentation as one of the benefits of utilizing corporate or single brand in marketing [55].

Owing to the different definitions of brand and market segmentation presented by scholars and since brand segmentation is important to decide for the promotional strategies of companies and to establish brand reputation in the customers' minds, in this paper we employed both types of definitions as brand and market segmentation to create measurement items in our questionnaire.

2.2. Methodology

This research is a cross-sectional study and in terms of objective, it is an applied study and has used both qualitative and quantitative analyses, which are explained in the following subsections.

2.2.1. Conceptual Model and Hypotheses

Here, the main construct is the use of corporate reputation. As we explained before, this construct has three dimensions: value creation, strategic resources and corporate communication. Each of these three dimensions includes several items and is hypothesized to be related to brand segmentation, which is utilized as an output of the uses of corporate reputation in this model.

This framework has been developed by summarizing and synthesizing the works of a number of scholars [9, 38, 56, 57] who have previously studied the use of corporate reputation. Chen-Chu Chen, [2] has suggested a model and we have extended her work by paying explicit attention to the influences of brand segmentation and company reputation.

In our study, we intend to investigate the impact of corporate reputation on brand segmentation-setting among brand managers and those who are effective in deciding upon branding procedures in the Iranian pharmaceutical industry.

According to what we mentioned above our hypotheses are as follows:

H1: *Value creation as a dimension of the uses of corporate reputation has a positive impact on a firm's brand segmentation strategy.*

H2: *Strategic resources as a dimension of the uses of corporate reputation has a positive impact on a firm's brand segmentation strategy.*

H3: *Corporate communication as a dimension of the uses of corporate reputation has a positive impact on a firm's brand segmentation strategy.*

2.2.2. Research Strategy

In this study, we employed a "mixed method approach" [58]. It employs collecting and analyzing data by both forms of research styles, qualitative and quantitative [59].

At the first phase of the study, a qualitative method is adopted, using content analysis of managers' opinions on their decisions regarding brand segmentation strategy and the importance of corporate reputation uses for the pharmaceutical industry. This method is previously adopted by several researchers [2, 42, 60, 61] to achieve the same objectives for corporate reputation studies.

At the second phase, SEM (structural equation modeling) is applied to analyze the

proposed model and to test the hypotheses by using P.L.S. 2.0 software.

To generate a qualitative data collection, after reviewing articles and books, semi-structured interviews were conducted to unfold what surrounds our phenomenon [62] as follows:

At First, a list of questions was designed on basis of the reviewed literature and the research question, along with open-ended questions.

After this step, a research framework was designed and presented to the interviewees.

Finally, the interviewees answered the semi-structured questionnaires so that a better perspective on the relationship between the hypotheses and related issues would be reached.

The number of interviewees was 18, currently working in pharmaceutical factories and companies as managing director, sales and marketing manager, branding manager, R&D manager, and responsible pharmacist.

2.2.3. Research Design

2.2.3.1. Qualitative Data Collection

2.2.3.2. Research Setting

Reviewing the literature shows that the majority of studies regarding corporate reputation and brand segmentation strategy have been conducted in Western countries (the USA, the UK, Germany, Australia, and the Netherlands, etc.) which have limited any generalizability of theory [63, 64].

To bridge this gap, we chose Iran, one of the most important countries in the Middle

East as the setting of this study and pharmaceutical industry as one of the most important industries in Iran.

2.2.3.3. Scale Development and Validation

In this study, our scale development procedure included three major steps:

The first step involves specifying operational definitions and dimensions of focal constructs to help the subsequent generation of hypothesized items to refer to each dimension. A literature search helped achieving this step.

The second step involves creating additional measurement items using semi-structured interviews with experts. The experts' interviews included showing the conceptual framework to respondents and asking questions on the measurement items of each construct. Before the final questionnaires were completed, respondents were asked to point out any item that was either ambiguous or difficult to answer [65]. Subsequently, coefficient alphas' and item-to-total correlations were computed to check the reliability of measurement scales. Item-to-total correlations above 0.3 and coefficient alphas above 0.7 were accepted as reliable scales [66, 67].

A set of questionnaires along with purified items from this step was edited and prepared for the main survey [68, 69]. The final reliable and validated questionnaire which was ready to be distributed had measures and items as follows:

1) Value Creation as an independent factor involved 10 questions.

- 2) Corporate Communication as an independent factor involved 6 questions.
- 3) Strategic Resource as an independent factor involved 7 questions.
- 4) Brand Segmentation as a dependent factor involved 5 questions.

In the third step, following the main survey, purified measurement scales were tested if they could meet the hypotheses and sent to confirmatory factor analysis (CFA) as a method to confirm the scales. This procedure was employed to examine scale properties, such as reliability, and construct validity.

2.2.4. Main Survey

The participants of the main survey were managers and executives (managing directors, marketing managers, sales managers, general managers and their executives and responsible pharmacists) from the pharmaceutical industry in Iran. The respondents had enough knowledge and experience in setting brand strategies, which are related to strategies of corporate reputation. Researchers used confirmatory factor analysis (CFA) to finalize the scales [67].

A minimal sample size for CFA is usually recommended to be more than the number of co-variances in the input data matrix [70, 71]. Since it has planned to use PLS (Partial Least Squares, one of the structural equation modeling software) to perform CFA, an empirical ratio of at least five observations per parameter has also been proposed [72].

Floyd and Widaman (1995) asserted that a sample size of approximately five to ten observations per parameter is likely to be sufficient.

Based on the discussion above and experts who accepted to reply the questionnaires, the sample size in this study was 258, which supported enough participants. The total repliers were 243 and 239 questionnaires were valid. The 239 valid questionnaires were put in smart PLS 2.0 and the results are as follows in next part.

3. Results and Discussion

3.1. Reliability and Validity

Tables 1, 2, 3, and 4 show the results of Confirmatory factor analysis.

Table 1. Confirmatory factor analysis of value creation.

	Variable (questions)	Measurement error	Factor loading	CR	AVE
				0.92	0.63
1	VC1	0.61	0.67		
2	VC2	0.25	0.83		
3	VC3	0.45	0.79		
4	VC4	0.32	0.81		
5	VC5	0.49	0.77		
6	VC6	0.21	0.84		
7	VC7	0.71	0.62		
8	VC8	0.65	0.67		
9	VC9	0.51	0.71		
10	VC10	0.54	0.74		

Cronbach's Alpha =0.91; the factor loading is a standardized value, indicating $p \leq 0.05$

Table 2. Confirmatory factor analysis of strategic resources.

	Variable (questions)	Measurement error	Factor loading	CR	AVE
				0.91	0.65
1	SR1	0.21	0.94		
2	SR2	0.34	0.91		
3	SR3	0.29	0.93		
4	SR4	0.54	0.78		
5	SR5	0.48	0.81		
6	SR6	0.36	0.88		
7	SR7	0.49	0.84		

Cronbach's Alpha =0.93; the factor loading is a standardized value, indicating $p \leq 0.05$

Table 3. Confirmatory factor analysis of corporate communication.

	Variable (questions)	Measurement error	Factor loading	CR	AVE
				0.89	0.58
1	CC1	0.37	0.83		
2	CC2	0.33	0.85		
3	CC3	0.61	0.69		
4	CC4	0.38	0.79		
5	CC5	0.41	0.77		
6	CC6	0.39	0.81		

Cronbach's Alpha =0.88; the factor loading is a standardized value, indicating $p \leq 0.05$

Table 4. Confirmatory factor analysis of brand segmentation.

	Variable (questions)	Measurement error	Factor loading	CR	AVE
				0.90	0.73
1	BS1	0.32	0.83		
2	BS2	0.37	0.81		
3	BS3	0.26	0.88		
4	BS4	0.48	0.71		
5	BS5	0.41	0.79		

Cronbach's Alpha =0.92; the factor loading is a standardized value, indicating $p \leq 0.05$

3.2. Model Evaluation

Structural Equation Modeling (SEM) using PLS method was used to evaluate the model. PLS (Partial Least Squares) was used to test the hypothesized relationship between the research constructs as postulated in the conceptual model. To assess the overall goodness-of-fit between the proposed model

and the collected data also a CFA was conducted.

To test the model's reliability, Cronbach's alpha coefficient was calculated. At first, it was calculated for the questionnaire using SPSS software and the coefficient was 0.92, which is acceptable, and for each relation in the model alpha is as follows:

For relation between value creation and brand segmentation strategy, the alpha is 0.91, For relation between corporate communication and brand segmentation strategy, it is calculated 0.88. and the relation between strategic resources and brand segmentation strategy, is 0.93. For whole model validity, the CV Red. and CV Com. have positive amounts which shows suitable validity.

3.3. Results of Hypotheses Test

Figure 3 presents the details of the parameter estimates for the model and Table 5 shows the results of the hypotheses tests.

As we observe the results do not provide complete support for the primary hypotheses that corporate reputation uses have positive influences on the brand segmentation strategy.

The results partially support the hypothesis (H1) that value creation has a positive impact on brand segmentation and the impact is weak (Path coefficient = 0.307, $t_value = 1.806$, $p \leq 0.05$).

The results do not support the hypothesis (H2) that strategic resource has a positive impact on brand segmentation (Path coefficient = 0.246, $t_value = 1.465$, $p \leq 0.05$). Thus the hypothesis (H2) is rejected.

In addition, in the last part, the results show no support for the hypothesis (H3) that corporate communication has a positive impact on brand segmentation (Path coefficient = 0.199, $t_value = 1.301$, $p \leq 0.05$) therefore the hypothesis (H3) is rejected.

The RSq of the model is 0.805 that supports the model strongly.

3.4. Discussion

Brand management increasingly is to be the most important capability for several industries to differentiate companies from their competitors. Segmentation as a part of branding strategy is to be more important in the pharmaceutical industry. Healthcare agencies (government, regulators, payers) all recognize the value of brand and market

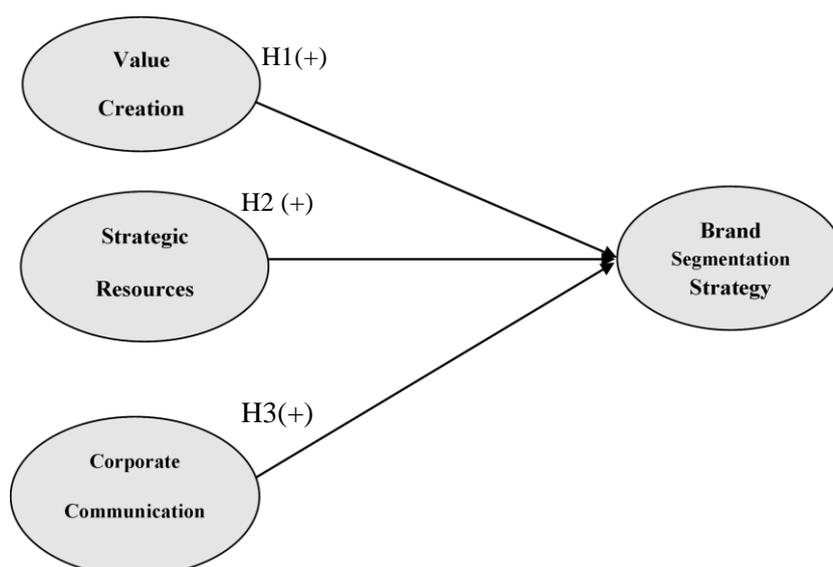


Figure 3. The conceptual framework and Hypotheses.

Table 5. Summary of the hypotheses tests and results.

Hypotheses	Relationships		Path coefficient	t_ value	Result
H1	VC	BS	0.307	1.806	Partially accepted
H2	SR	BS	0.246	1.465	Rejected
H3	CC	BS	0.199	1.301	Rejected

t_ values Significant at $p \leq 0.05$.

segmentation for decision-making concerning new product registration, inclusion in best-practice guidelines, reimbursement and pricing. Among the manufacturers, there is agreement that brand and market segmentation should occur earlier, to drive market understanding and provide a foundation for more efficient brand development [7].

According to Dannenberg and Kleinhaus (2004), value creation occupies an important part of the brand management in a company [73]. Furthermore, according to Lynch and Chernatony (2004), emotional brand value development may cause value creation for their customers that can be a means of developing a sustainable differential advantage [74].

The researchers, in this study, assessed the relative influence of all use types of corporate reputation on brand segmentation by comparing their path coefficients and t-values and found that only value creation has a weak effect on brand segmentation and two other uses of corporate reputation do not have a positive effect on brand segmentation strategy. In this case, for value creation ($\beta = 0.307$ and $t\text{-value} = 1.806$) which differs from strategic resources ($\beta = 0.246$ and $t\text{-value} = 1.465$) and corporate communication ($\beta = 0.199$ and $t\text{-value} = 1.301$). This indicates that value

creation has a statistically significant relationship with brand segmentation but strategic resources and corporate communication have no significant relationship with brand segmentation. This suggests that, in the Iranian pharmaceutical industry, other things being equal, the more a firm focuses on its value creation ability, the easier it will be to build its brand segmentation strategy.

Here, another issue should also be noted. It is managerially and theoretically fruitful to understand what type of the uses of corporate reputation has more impact on brand segmentation as previously not enough literature has addressed this issue. The researcher, therefore assessed the relative influence of each dimension of the uses of corporate reputation on brand segmentation by comparing their path coefficients as above.

3.5. Implications

This study was motivated by the need for research that leads to a better understanding of the influences of branding and company reputation in pharmaceutical business markets. In terms of methodology, the contribution of this research is as follows. First, we tested corporate reputation and branding models in a country outside of the U.S.A and Europe due to the necessity for cross-cultural research [21,

76, 77] to establish the western researcher's external validity of theories [63, 78]. Second, this study verifies, adapts and purifies existing measurement instruments in a country which is culturally different from the setting in which these items were first developed. Finally this study enhances existing knowledge in branding and strategic management of medicines in countries like Iran.

In its strategic management view, this research indicates that the concept of the brand segmentation and its relation to corporate reputation requires more training in pharmaceutical industry, since in western countries they apply it and gain more advantages.

3.6. Future Researches

In this research, we have tested some western theories in a country of the Middle East. Maybe the same research in another country directs to another result, as Chen-Chu Chen. (2011) did and had some different results, thus, we suggest conducting the research in another country particularly in the Middle East or Asia.

This study is applied to one industry, it would be significantly different from other studies, which compare more than two industries in Iranian or compare the same (pharmaceutical) industry in more than two countries.

Another future direction of this research would be to develop a measurement to evaluate the relationship between this current study and financial performance to observe the impact of medicine price on the relationship

between corporate reputation and financial performance of pharmaceutical companies in Iran or another country.

4. Conclusion

A pharmaceutical company's value creation ability can be used as a statement of its corporate reputation. It may become known for creating functional value with a high standard of product. It may also create a good impression through using or purchasing its products or its customer services, and it may be known for having the long history or having an iconic impression on the industry, or for saving the customer's money or having the lowest cost for its product.

The value created for customers is judged to be helpful in their life. Customers gradually benefit from the value that a firm has created for them, and will start to appreciate the company as a reputable one. Thus, managers can build with that to segment their customers, depending on their needs.

Jason Gillikin, (2011) defined product segmentation as channeling slight variations of different products and services to different groups of customers that contributes to increase market share, improve revenues and reduce costs. By utilizing the results of this study, pharmaceutical industries can increase their market share. Moreover, Mehralian, et al. (2011), assert that the Iranian domestic pharmaceutical industry has not yet adequately developed to its full capacity and there are many potential capabilities for further growth and development [75]. The researchers, here, maintain that by using this study, the Iranian

pharmaceutical companies can enhance their capacity and gain more advantage.

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References

- [1] Capozzi L. Corporate reputation: Our role in sustaining and building a valuable asset. *JAR* (2005) 45(3), 290-293.
- [2] Chen-Chu C. The use of corporate reputation in the development of brand image strategy in the Taiwanese pharmaceutical industry. (2011).
- [3] Schultz M, Hatch MJ and Larsen MH. *The Expressive Organisation : Linking Identity, Reputation, and the Corporate Brand*. Oxford: Oxford University Press. (2000).
- [4] Bickerton D. Corporate reputation versus corporate branding: the realist debate. *Corporate Communications: IJ* (2000) 5(1), 42–8.
- [5] Ghose, Anindya, Panagiotis G, Ipeiritis and Sundararajan A. The dimensions of reputation in electronic markets. Working Paper, CeDER-06-02, New York University. (2006).
- [6] Kumar L, Panigrahi A. Communication with doctors: empowering Pharma field force with modern marketing techniques. *AJMR* (2014)5 (2): 191-201.
- [7] Greengrove K. Needs-based segmentation: principles and practice. *IJMR* (2002)44 (4): 405-21.
- [8] MacLennan J, Mackenzie D. An opportunity to integrate medical and marketing activities. *IJMM* (2000) 1(1): 40–52
- [9] Fombrun C, Shanley M. What's in a name? Reputation building and corporate strategy. *AMJ* (1990) 33: 233–58.
- [10] Berndt ER, Cockburn IM, Griliches Z, Keeler TE and Baily MN. Pharmaceutical innovations and market dynamics: tracking effects on price indexes for antidepressant drugs. *Brookings Papers on Economic Activity. Microeconomics* (1996): 133–99.
- [11] Prentis RA, Lis Y and Walker SR. Pharmaceutical innovation by the seven UK-owned pharmaceutical companies (1964-1985). *BJCP* (1988) 25: 387–96.
- [12] Achilladelis B and Antonakis N. The dynamics of technological innovation: the case of the pharmaceutical industry. *RP* (2001) 30: 535–88.
- [13] Kim Y, Kim L and Lee J. Innovation strategy of local pharmaceutical firms in Korea: a multivariate analysis. *TASM* (1989) 1: 29–44.
- [14] Panigyrakis GG, Veloutsou C. Brand managers in the pharmaceutical industry: are they any different? *JPBM* (1999) 8: 497–512.
- [15] Nakra P. Corporate reputation management: “CRM” with a strategic twist? *PRQ* (2000) 45: 35–43.
- [16] Ronald JB, Graeme M and Cary LC. *Corporate Reputation Managing Opportunities and Threats*. www.gowerpublishing.com. (2009) 2-43.
- [17] Michael L, Barnett JM, Jermier BA and Lafferty. *Corporate Reputation* (2008).
- [18] Bennett R, Kottasz R. Practitioner perceptions of corporate reputation: An empirical investigation. *Ccij* (2000) 5 (4): 224.
- [19] Fombrun CJ, Van Riel C. The reputational landscape. *Corporate Reputation Review* (2003)1(1&2): 5-12.
- [20] Weigelt K, Camerer C. Reputation and corporate strategy: a review of recent theory and applications. *SMJ* (1988) 9: 443–54.

- [21] Roberts PW, Dowling GR. Corporate reputation and sustained superior financial performance. *SMJ* (2002) 23: 1077–93.
- [22] Rao H. The social construction of reputation: certification contests, legitimation, and the survival of organisations in the American automobile industry: 1895-1912. *SMJ* (1994) 15: 29–44.
- [23] Rindova VP, Kotha S. Continuous “morphing”: competing through dynamic capabilities, form, and function. *AMJ* (2001) 44: 1263–80.
- [24] Davies G, Chun R, Da Silva RV and Roper S. Corporate Reputation and Competitiveness. UK: Routledge. (2003).
- [25] Ferris GR, Blass R, Douglas C, Kolodinsky RW and Treadway DC. Personal Reputation in Organizations. In J. Greenberg (Ed.), *Organizational Behaviour: The State of the Science*. (2003) 211-46.
- [26] Doorley J, Garcia HF. Reputation Management: The Key to Successful Public Relations and Corporate Communications. New York: Routledge. (2006).
- [27] Goldstein K. Corporate Reputation Management in the Pharmaceutical Industry. (2010).
- [28] Fombrun C and Shanley M. What’s in a name? Reputation building and corporate strategy. *AMJ* (1990) 33: 233–58.
- [29] Yoon E, Guffey H and Kijewski V. The effects of information and company reputation on intentions to buy a business service. *JBR* (1993) 27: 215–28.
- [30] Dutton JE, Dukerich JM and Harquail CV. Organisational images and member identification. *ASQ* (1994) 39: 239–63.
- [31] Brown MA. Energy-efficient buildings: does the marketplace work? In: Proceedings of the 24th Annual Illinois Energy Conference, Chicago, Illinois: University of Illinois Press. (1997) 233–55.
- [32] Saxton K. Where do reputations come from? *Corp. Rep.Rev.* (1998) 1: 393–99.
- [33] Dolphin RR. Corporate reputation – a value creating strategy. *Corp. Gov.* (2004) 4:77–92.
- [34] Gregory JR. Marketing Corporate Image. Lincolnwood, Illinois: NTC Business Books. (1991).
- [35] *Fortune* (1995) 6: 24–29.
- [36] Moerman LC, Van Der Laan SL. Accounting for intellectual property: inconsistencies and challenges. (2006) 11(4): 239–308.
- [37] DTI. Creating Value From Your Intangible Assets. London: Department for Trade and Industry. (2001).
- [38] Shkolnikov VM, Andreev EM, Leon DA, McKee M, Mesle F and Vallin J. Mortality reversal in Russia: the story so far. *Hygiea Internationalis* (2004) 4: 30–80.
- [39] Fombrun CJ and van Riel CB M. Fame and Fortune: How Successful Companies Build Winning Reputation. Pearson Education, New Jersey. (2004).
- [40] Maathuis OJM. Corporate Image, Performance and Communication. Delft: Eburon. (1993).
- [41] Fombrun CJ. Corporate reputation as economic assets ’. in M.A. Hitt, R.E. Freeman and J.S. Harrison (eds.), *The Blackwell Handbook of Strategic Management* , Blackwell Publishers, Malden . (2001)
- [42] Deephouse DL. Media reputation as a strategic resource: An integration of mass communication and resource-based theories. *GM* (2000) 26 (6): 1091 – 1112 .
- [43] McMillan GS and Joshi MP. Sustainable competitive advantage and firm performance: the role of intangible resources. *Crr* (1997) 1: 81–85.
- [44] Lerbinger O. The Social functions of public relations. In: O. Lerberger and J. A. Sullivan (eds), *Inf. Influ.and Com.*, New York: Basic Books. (1965).
- [45] Grunig JE. Situational Theory of Publics. *Encyclopedia of Public Relations*, Thousand Oaks, CA: Sage: (2005) 778-780.
- [46] Stanwick PA and Stanwick SD. The relationship between corporate social performance, and organisational size, financial performance, and environmental performance: An empirical examination. *JBE* (1998) 17: 195– 204.

- [47] Brammer SJ and Pavelin S. Corporate reputation and social performance: the importance of fit. *JMS* (2006) 43(3): 435–55.
- [48] Puente EQ, Fuente-Sabaté JM and Bautista DG. Corporate social performance and corporate reputation: two interwoven perspectives. *Corp. Rep. Rev.* (2007) 10: 60–72.
- [49] Keller K, Heckler S and Houston M. The effects of brand name suggestiveness on advertising recall. *JM* (1998). 62 (1): 48–58.
- [50] Kotler P, Adam S, Brown L and Armstrong G. Principles of Marketing, (second ed.). Prentice Hall, New Jersey. (2003).
- [51] Kapferer J. The new strategic brand management, (4th edition) . Kogan Page , London. (2008) 10-11.
- [52] Schuiling I, Moss G. How different are branding strategies in the pharmaceutical industry and the fast-moving consumer goods sector? *JBM* (2004) 11(5): 366-80.
- [53] Lynn, Michael (2007), Brand Segmentation in the Hotel and Cruise Industries: Fact or Fiction? CHR Reports. www.chr.cornell.edu
- [54] Lynn M. Segmenting and Targeting Your Market: Strategies and Limitations. www.chr.cornell.edu. (2011)
- [55] Laforet S. Brand names on packaging and their impact on purchase preference. *JCB* (2011) 10 (1): 18-30.
- [56] L'Etang J. Public relations and sport in promotional culture. *PRR* (2006) 32: 386–394.
- [57] Sabaté JMF, Puente EQ. Empirical analysis of the relationship between corporate reputation and financial performance: a survey of the literature. *CRR* (2003) 6: 161–77.
- [58] Tashakkori A, Teddlie C. Handbook of Mixed Methods in Social and Behavioural Research. Thousand Oaks, California: Sage. (2003).
- [59] Creswell JW. Research design: Qualitative, Quantitative, and Mixed Methods Approaches. (3rd ed.). Thousand Oaks, Calif: Sage Publications. (2009).
- [60] Bickerton D. Corporate reputation versus corporate branding: the realist debate. *CCIJ* (2000) 5: 42–48.
- [61] Bromley DB. Psychological aspects of corporate identity, image and reputation. *CRR* (2000) 3: 240–52
- [62] Carson D, Gilmore A, Perry C and Gronhaug K. Qualitative Marketing Research. London: Sage (2001). Publications.
- [63] Peng T, Peterson M and Shyi Y. Quantitative methods in cross national management research: trends and equivalence issues. *JOB* (1991) 12: 87–107.
- [64] Trompenaars F, Hampden-Turner C. Riding the Waves of Culture: Understanding Diversity in Global Business. New York: McGraw Hill. (1998).
- [65] Kohli AK, Jaworski BJ and Kumar A. MARKOR: a measure of market orientation. *JMR* (1993). 30: 467–77.
- [66] Churchill JGA. A paradigm for developing better measures of marketing constructs. *JMR* (1979) 16: 64–73.
- [67] De Vellis RF. Scale development. Newbury Park, California: Sage. (2003).
- [68] Algesheimer R, Dholakia UM and Hermann A. The social influence of brand community: evidence from European car clubs. *JM* (2005) 69: 19–34.
- [69] Long-Tolbert S. A Conceptual Framework and Empirical Tests of the Antecedents and Consequences of Corporate Reputation: a Study of Consumer Markets. unpublished PhD thesis, Ohio State University. (2000).
- [70] Hair JF, Black WC, Babin BJ, Anderson RE and Tatham RL. Multivariate Data Analysis. (6th ed.). Upper Saddle River, New Jersey: Prentice Hall. (2006).
- [71] Netemeyer RG, Bearden WO and Sharma S. Scaling Procedures: Issues and Applications. Thousand Oaks, California: Sage Publications. (2003).
- [72] Bollen KA. Structural Equations with Latent Variables. New York: Wiley. (1989).

[73] Dannenberg J and Kleinhaus C. The coming age of collaboration in the automotive industry. *MMJ* (2004) 17: 87–94.

[74] Lynch J and de Chernatony L. The power of emotion: Brand communication in business-to-business markets. *JBM* (2004) 11: 403–19.

[75] Mehralian G, Rasekh HR, Akhavan P and Sadeh MR. The Impact of Intellectual Capital Efficiency on Market Value: An Empirical Study from Iranian Pharmaceutical Companies. *IJPR* (2012) 11: 195-207

[76] Gardberg NA and Fombrun C J. The global reputation quotient project: First steps towards a cross-nationally valid measure of corporate reputation. *CRR* (2002) 4(4): 303–7.

[77] Nguyen N and Leblanc G. Corporate image and corporate reputation in customers' retention decisions in services. *JRCS* (2001) 8: 227–36.

[78] Boyacigiller NA and Adler NJ. The parochial dinosaur: organizational science global context. *AMR* (1991) 16: 262–90.