

ANALYZING RELATIONSHIP MARKETING REGARDING PHARMACEUTICAL SALES REPRESENTATIVES AND PHYSICIANS IN PAKISTAN

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Abstract

The personal relationship is the critical component of many advertising exercises for making, creating and keeping up long haul business connections. In Pharma-industry, Medical representatives have the exhausting obligation of giving presumptive knowledge to Doctors in an exceeding climate wherever limitations area unit increasing.

Objectives: *Physician's* opinion about medical-representative's relations (Perceived values, Perceived characteristics, Pharmaceutical organization perception).

Hypothesis: *H1:*A distinction between doctors accepting the Medical-Representatives excellence. *H2:*A distinction as for the standard of the connection of the Medical Representatives to the medical practitioners/doctors *H3:* A distinction as for the standard of Medical-Representative's meetings.

Methodology Collected primary data, develop survey using 5 Likert questionnaire methods to analyze the relationship of independent variables (Perceived values, characteristics and organization perception) with the dependent variable (Physicians perception of MR). The target population was 200 and the total respondent was 77. Data analysis by SPSS and Smart PLS.

Result: The demographic based on male70%, Female30%, Age (41-55years), Employment Duration (10-15year), Workplace (Pakistan) and Area of work (Govt hospitals, private hospitals/clinic). The doctors were 77 from different segments. Validity and reliability were checked by the measurement model and hypothesis checked by a structural model. **Conclusion:** Physician's Pharmaceuticals and salesman's cooperation and acknowledgment of endowments from the organization's PSRs have been found to influence doctors' recommending and are probably going to add to nonsensical endorsing of the organization's medication.

1.0 Introduction

1.1 Background to the study

The personal relationship is the critical component of many advertising exercises for making, creating, and keeping up long haul business connections. Organizations today have concentrated on making solid individual associations with accomplices, providers, and clients to serve their inclinations. The premium is large to the point that many accept that advancement through close to home connections is the new model for advertising (Marmat, Jain et al. 2020)

In most medicine companies, Medical representatives have the laborious obligation of giving credible knowledge to Doctors in an exceeding climate wherever limitations area unit increasing. The numbers of rules even as admittance to Doctors have gotten significantly restricted. That's the rationale in addition for MR to advance their image not completely to the Doctors nevertheless to boot to the rest of the employees. Since Marketing is halfway founded on close to home connections, it is significant that Medical representatives in Pharmaceutical center on building such connections. It is of most significance for scientists to assess the specialist's view of doctors and the effect of this insight.

In the wake of get-together all data needed for understanding the components that influence specialist's insight towards Pharmaceuticals, information assortment was directed in huge metropolitan cities (Karachi Lahore Sukkur Hyderabad).

The aftereffects of this examination will introduce the image perception of the Doctor hold for Pharma in Pakistan especially in Karachi and the role clinical delegates play in framing the Doctors insight. Extraordinary consideration was given to the components of MR qualities that Doctors rely on basic and vital throughout the calls. The ulterior intention of this task is that the assessment of the variables that decide a drug organization's Status in the market.

These variables incorporate what this organization represents (character of the organization) or what can be found in its current circumstance (personality of the organization).

Organizational personality has appeared through its open promoting. For the drug market of endorsing medication, the most special instrument for an extended time has been interface advertising. Interface advertising has been typically viewed as a vis-à-vis specialized device that alludes to moves someone makes through near to home intercourse, more often by talking to a corporation, aiming to advise, persuade or prompt someone or a gathering to try and do things a company is later than through Representatives(Hunter 2020).

1.2 Aim of the Research

This analysis plans to explore the estimation of medical sales teams to build up an organizational image and to measure the Doctor's assessment for medical representatives.

1.3 Objectives

The objectives of the current work are:

- To design a theoretical methodology as complete as conceivable regarding the organization status
- To present a theoretical model that options the components that assembles the organization Status and task a progression of presumptions concerning about the impact on the organization's status?
- To reveal the devotion of the traits of the medical representatives in build a positive standing for the organization.
- To examine doctor opinion for medical representatives.

Literature Review

The pharmaceutical trade invests heavily in promotion, and it uses a range of promotional ways to influence physicians' prescribing choices. Medical representatives (MR's) mostly try to the key personnel utilized in promoting their product. One important consequence of the interactions between physicians and medical representatives may be a conflict of interests which can contribute to the overprescribing of medicines and therefore negative effects on patients' health and economics. (Al-Areefi and Hassali 2013)

Physicians understood the idea of conflict of interest and applied it to relationships with medical representatives. However, they protract favorable views of physician-detailer exchanges. Holding these reciprocally contradictory attitudes, physicians were in an exceeding position of psychological feature dissonance. To resolve the dissonance, they used a spread of denials and rationalizations: They avoided pondering the conflict of interest, they disagreed that trade relationships affected medical practitioner behavior, they denied responsibility for the matter, they enumerated techniques for remaining impartial, and that they reasoned that conferences with detailers were instructional and benefited patients. (Chimonas, Brennan et al. 2007)

2.1 Relationship Marketing

Relationship promoting seems to be the backbone of the pharmaceutical business, as proven by the continual will increase within the variety of field sales representatives. Changes in FDA pointers, however, providing for accrued direct-to-consumer advertising of the pharmaceutical product, yet as will increase within the variety of pharmaceutical sales representatives job on physicians and also the impact of managed care on a physician's time and financial gain, have all weakened the perceived importance of the PSR. (Wright and Lundstrom 2004).

2.2 Relationship between Pharmaceutical companies and Physicians

The relationship between pharmaceutical corporations and physicians has become a matter of dialogue and criticism regarding its real objectives and its potential impact on the flexibility to produce moral and professional look after patients. inside this context, in 1988, the planet Health Organization (WHO) developed moral criteria for medicament promotion to enhance the rational use of medication among health care professionals (Al-Hamdi, Hassali et al. 2012)

Interaction between physicians and pharmaceutical, medical apparatus, and alternative medically connected industries have received tidy attention in recent years. we tend to surveyed physicians to gather data regarding their money associations with business and therefore the factors that forecast those relations. (Campbell, Gruen et al. 2007).

2.3 World health organization describe medicine advertising

The World Health Organization describe medicine promotion as all informational and convincing activities by makers and distributors, the impact of that is to influence the prescription, supply, purchase, or use of medicative medicine however dishonest data, incentives and unethical trade practices were known as strategies to extend the prescription and sale of medicine. Medical sales representatives offer incomplete medical data to influence prescribing practices; they additionally provide incentives as well as conferences, seminars, and national and aboard support. Doctors additionally demand gifts and different incentives, they appear to each medical representative as a check for themselves, as once doctors' associations threaten to boycott firms that don't accommodate their demands for support. makers, chemists and medical representatives use numerous unethical trade practices of explicit interest was the finding that chemists area unit major players during this system, providing drug data on to patients. (Goyal and Pareek 2013).

2.4 Hypothesis development

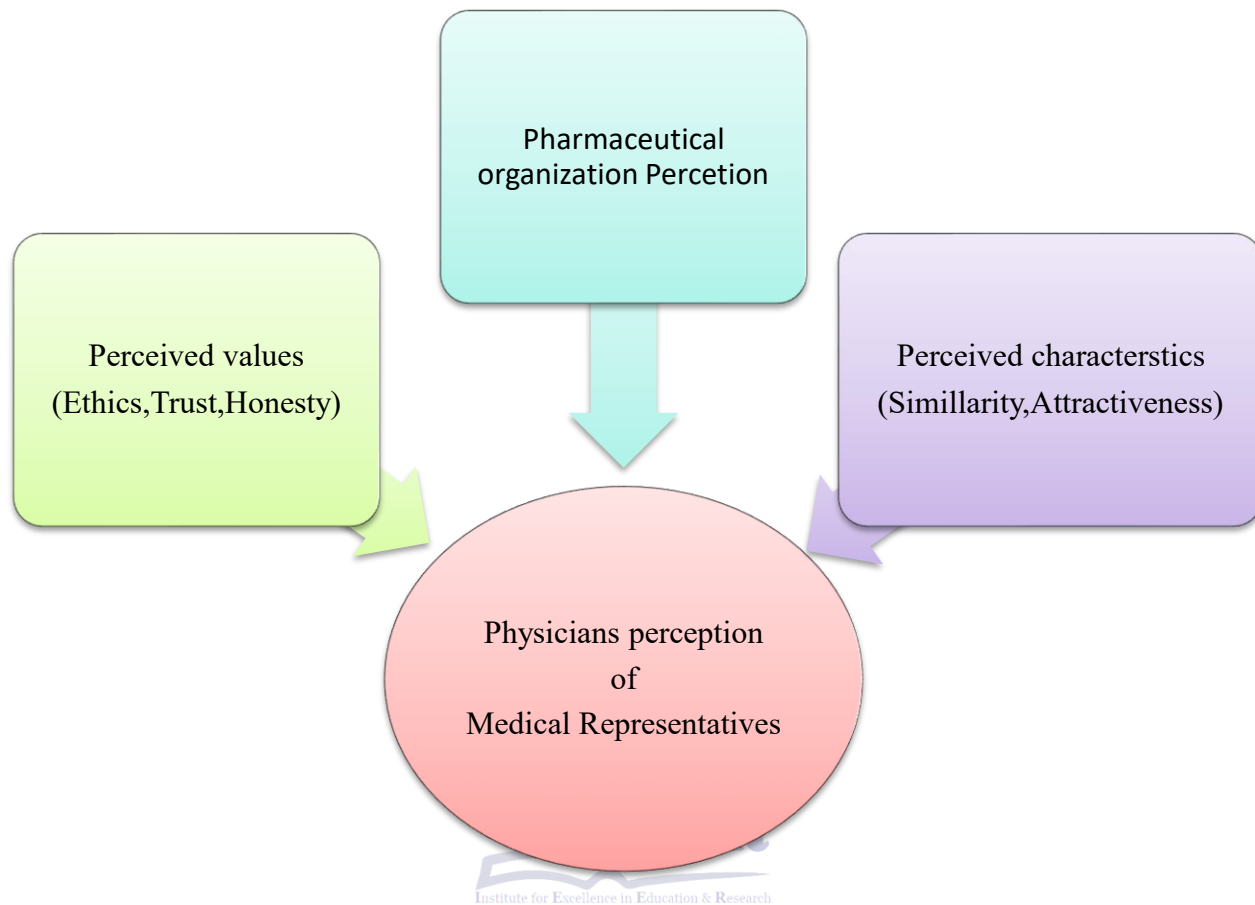
The following hypotheses were developed:

H1: There is a distinction between doctors accepting the Medical Representatives excellence.

H2: There is a distinction as for the standard of the connection of the Medical Representatives to the medical practitioners or Doctors

H3: There is a distinction as for the standard of Medical Representative's meetings.

2.5 Conceptual Framework



Dependent Variables Physician’s perception of Medical Representatives

Independent Variables pharmaceutical Company’s perception, Perceived values, Perceived characteristics.

3.0 Promotion in the Pharmaceutical Industry

More than half (60%) pharmaceutical companies believe that pharmaceutical marketing is not satisfactory in Pakistan. The 40% of companies spend between 20-30% of their income on pharmaceutical marketing (figure 4). The 60% of companies admit that trend of pharmaceutical marketing in Pakistan is unethical. More than half (51%) pharmaceutical companies admit that they are responsible for the trend of unethical marketing in Pakistan. The 95% of pharmaceutical companies believe that the quality of the drug is essential along with marketing. The 74% of pharmaceutical

companies believe that a Bachelor of Pharmacy is an ideal qualification for the promotion of their products. The 85% of pharmaceutical companies claim that they organize ethical lectures among SPO's to promote ethical pharmaceutical marketing. The 59% of companies deny that incentive/bonus schemes of pharmaceutical companies for SPO never inspire them toward unethical pharmaceutical marketing. Most (46%) organizations participate in medical/pharmaceutical conferences and seminars by providing gifts and funds. (Ahmad, Akhtar et al. 2011).

3.1 Status of medicine companies and its significance to the medical sales teams.

Clinical data through calls is that the main channel among pharmaceutical organizations and physicians. The sales team are viewed because the third most vital element of a drug organization

and there's a significant level of reference to the organization character through the image of a business power(Jiang and Gu 2016)

Drug organization agents could impact the prescribing habits and expert conduct of doctors(Brax, Fadlallah et al. 2017)

Controversy exists over the means that doctors have normal contact with the drug organization and its salesmen, those bear a greater income per annum elevating to them by supported lessons and symposia. Going to support proceeding with clinical instruction (CME) occasions and tolerating subsidizing for movement or housing for instructive symposia were related with expanded solution paces of the support's medicine. The stretch out of doctor industry communications seems to influence recommending and proficient conduct and should be additionally tended to at the degree of strategy and training(Shubhakaran and Khichar 2020)

Pharmaceuticals industries in industrial nations by and large observation on Medical Sales Representatives because the most imperative part within the advancement of their things, with the results, that over 50% of consumptions on advancement mostly dedicated to Medical Sales Representatives. Studies from numerous industrial nations have indicated that over 90% of doctors see Medical Representatives and a generous rate rely smartly on them as wellsprings of knowledge concerning medicine.(Aid, Eklund et al. 2017).

3.2 The job and centrality of medical representatives

The personal sale is generally viewed as a relational device that alludes to activity one makes through relational contact regularly by speaking to an organization and targeting advising, persuading, or reminding an individual or a gathering to do valuable things for the organization one works for.

As indicated by the Association of British Pharmaceutical Industry (ABPI) a number of them are:

- To offer further logical information to the medications they advance.

- To function as a bridge between the organization and the specialist via conveying importation starting with one then onto the next.

- To give studies to the organization items and related issues

- To coordinate gatherings, for limited time causes as well as for enlightening.

- To counsel specialists for adverse effect.

Besides, the importance of clinical sales representatives will similarly be seen from the increasing using the range. To review, the estimation of medical sales officers as a retailing suggests that depends on the concept of the things, plan the ideas, the concept of the business and therefore the idea of the purchasers, that for the drug business are the prescribers. (Gidwani 2018).

3.3 The value of medical sales team

A medical salesperson ought to have unbelievable knowledge on the competitive things, anyway, ought to certainly not offer fake information and deceive the consultant. Along these lines, knowledge on things and the right introductions are elementary and characterize trustiness, which is basic for the well-being issue. Medical sales officer that speaks shows have a positive image to physicians. Physician's belief for MSR is made from multiple points of view. By and large, it implies that the specialist depends on the MSR that he will teach his inclinations a thing or two and long haul. Additionally, trust assumes a determinant job in selling.

4.0 RESEARCH DESIGN

4.1 Research paradigm

This study used the positivist examination paradigm by putting in the hypothesis that is supported by the prevailing theories. The hypotheses were tested and established or disproved by quantitative and applied mathematics/statistical ways to answer the analysis of objectives and attain the investigation functions. The selection of a positivist approach was even on the idea at the study was target-hunting by theories from that specific hypotheses were concerned, that lead to the gathering of facts that provided the idea for resultant

hypothesis testing.

4.2 Gathering and Analyzing data

Gathering information may take longer than consequent and the system is more confounded. Anyway, its outcomes might be more precise. Information most often collected by qualitative and quantitative assessments. The qualitative analysis has got to perform through the data that's abstraction or obtaining method is tough. Such data could be sentiments either or the assessments and not seem to be predictable by statical figures. Then again quantitative exploration is the one that utilizes methods and tests and gives results that can be measurably assessed(Sandelowski 2000) therefore quantitative research is used for this assignment.

4.3 Research Planning

The questionnaires were through by and-via-and face to face since the chance of obtaining reactions by expert doctors is unable to help given their restricted time spent on regulative errands and full spotlight on their clinical follow. Phone conferences would be too impersonal and vital information might have incomprehensible. The coordination's of information assortment live mentioned pre-masterminded conferences with Doctors. Each specialist by and by was given explicit guidelines for the culmination of the surveys. The points and goals of the investigation were disclosed to specialists before their assent in participating in the research.

4.4 Strategies used to obtain data

For reasons that need to do with value of money, time, and limited manpower points it's inconceivable to expect and assemble evidence from all specialists who are a piece of the clinical network. Hence an example was taken from this populace and utilized a testing technique to arrive at decisions about the commitment of Medical Representatives and their part in forming an organization's standing.

4.5 Sampling

The populace, as referenced previously, were Psychiatrists, Cardiologist, General practitioner (simplest access, give more opportunity to these

kinds of exploration, inclusion with human behavior) that practice the clinical calling in the zones of Karachi, Lahore, Sukkur and Hyderabad.

The choice of explicit strengths occurred after an examination that occurred in specialists in the territory of Karachi and particularly with KOLs. The investigation was made with consultations and the interrogations onto those potency of specialists they consideration was the foremost incontestable to possess associate degree assessment for the Medical Sales Representatives of drug companies dynamic in the country particularly in Islamic Republic of Pakistan at most of the urban areas particularly Karachi.

200 doctors were the target population in this research which was the largest number.

After the idea, the basic arbitrary inspecting technique was chosen. This technique is a way of examining. Every member has an equivalent possibility of being chosen. For this situation, a full list of the members is required. The significant explanation behind choosing this technique is the way that a full rundown of Psychiatrist-Cardiologist -General practitioner in the chose territories (Karachi, Lahore, Sukhar and Hyderabad) is accessible.

A similar study by Owino &Kwasira (2016) adopted the same formulae in their study on selected GHRM Practices at Menengai Limited.

$$\text{Sample size} = \frac{N}{1 + N e^2} = \frac{200}{1 + 200 (0.09)^2} = 76.33$$

4.6 Questionnaire Planning

The queries were given within the precise order to every member. The rationale for the high calibration degree was necessary to form positive that each one participant would answer identical queries. In addition, the calibrated.

The survey was created to obtain the result of the Medical Sales Team to create organization clear image even as a specialist's perception of Medical Salespersons. The bases on that the survey was organized where: integrity faith truthfulness.

As delineated within the Henry Stewart (Stewart 2004) model.

Likert scale was utilized. Its grit relies on the easiness and objectiveness whereas to permissible members to indicate its degree of disagreement or conformity conflict via a cycle of proclamations relying upon the research aim.

5.0 Findings and Discussion

5.1 Primary Research results

All examination was led applying the factual series on SPSS 23 (Statistical and mathematical program for Societal Sciences) and Smart PLS. The software can deal with a huge volume of information and perform convoluted computations.

5.2 Measurement model

To examine the model developed for this study, a partial method of least squares (PLS) analysis is used on Smart PLS updated version program. (Ringle, Wende, & Becker, 2015) was used. Smart PLS is a software system that will analyze smaller known sets of data that field traditional. Survey analysis models are mostly non-normal, and in and of itself, this method is that the best suite for the analysis. We tend to test the measurement model, followed by an associate examination of the structural model, following

the rules within the literature. (See Anderson & Gerbing, 1988; Hair et al., 2017).

The model we tend to develop enclosed a second-order element for possessions. Thus, we tend to 1st tested the first-order elements, followed by the second-order elements legitimacy and dependableness. As steered by Hair et al. (2017) and Mahmud, Ramayah, and Kurnia (2017). We tend to used element loadings, average variance extracted (AVE), and composite dependableness (CD) to check the confluent validity, followed by the differentiate validity.

The Cronbach's Alpha in Table 5.2 shows that the constructs are ranging from 0.80 to 0.86 which means that all the constructs are valid and reliable. The AVE values are mostly higher than the 0.5 and the construct reliability is mostly greater than the 0.80 thresholds (Hair et al, 2014). The 2nd-order elements in addition passed the 3 criteria, so both the 1st and 2nd-order elements are effective and steadfast. Discriminate validity was examined (Table 5.5) using the HTMT criterion (Henseler, Ringle & Sarstedt, 2015), that pass by the 0.85 threshold (Kline, 2011), representing that discriminate validity was recognized.

5.3 Demographics of Respondents

Table 5.3 Demographic Positions of Respondents

	Respondents	Frequency	Percentage
Gender	Male	54	70.1%
	Female	23	29.9%
	Total	77	100%
Age	Below 40	10	13%
	41-55	50	64.9%
	55-60	09	11.7%
	Over 60	08	10.4%
	Total	77	100%
Employment Duration	Less than 10years	29	37.7%
	10-15years	29	37.6%
	More then 15	19	24.7%

	Total	77	100%
Practice abroad	Yes	10	12.98%
	No	67	87.01%
	Total	77	100%
Area of work	Karachi	33	42.9%
	Hyderabad	17	22.1%
	Sukkur	15	19.5%
	Lahore	12	15.6%
	Total	77	100%
Workplace	Govt Hospital	20	26%
	Private Hospital	22	28.6%
	Private clinic	35	45.5%
	Total	77	100%

As mention in table 5.3 the demographic is based on Gender, Age, Employment Duration, Abroad practice, Workplace and Territory.

Overall data was collected from 4 Cities and the doctors were 77 from different segments.



5.3 Response Rate

Table 5.3 Response Rate

Respondents	Expected Number	Response	Respo Rate (%)
	Of Respondents	Total(N)	
Cardiologist	29	27	35.1%
General practitioner	24	21	27.3%
Neurologist	31	29	37.7%
Total	84	77	100%

The study involved 77 Respondents where 27 were cardiologists (35.1%), Gp 21(27.3%), and Neurologists 29 (37.7%).

Table 5.4 Reliability and validity

Constructs	Cronbach's Alpha	Rh	CD	AV.E
Physicians overall perception of Representatives	0.917	0.920	0.941	0.738
Organization Perception	0.815	0.812	0.815	0.520
Perceived Values	0.878	0.942	0.899	0.633
Perceived Characteristics	0.748	0.843	0.912	0.742

*Rh= Reliability measure, *CD = composite dependability; ***AV.E = Average Variance Extract.

Table 5.5 Discrimination of Validity (HTMT)

Beliefs	RMRP	MRH	MRB	MRE
Relation Medical Representatives with physicians	0.821			
Medical Representatives honesty	0.765	0.909		
Medical Representatives behavior	0.650	0.803	0.954	
Medical Representatives ethics	0.561	0.792	0.801	0.931

RMRP=Relation Medical Representatives with physicians, MRH=Medical Representatives honesty, MRB=Medical Representatives behavior, MRE= Medical Representatives ethics

The first objective to find the physician's perception about medical representative's honesty regarding working medical information. The respondents were vital for rate difference statements using a scale of 5 to 1 (SA = strongly agree, A = Agree, N = Neutral, DA= Disagree, SDA=Strongly Disagree). The findings are in Table 5.6.1.

5.6 Descriptive Results

5.6.1 Doctors’ trust for Medical Representative visits.

Table 5.6.1	Doctors’ trust for Medical Representative visits.						
	SA	A	N	DA	SDA	Mean	Std. Deviation
The Medical sales Representative that appointment me are usually straightforward and fair.	26%	45.5%	10.4%	9.1%	9.1%	3.7031	1.2146
The Medical sales officer don’t lie to me in their visit.	19.5%	49.4%	10.4%	14.3%	6.5%	3.6104	1.1488
The Medical sales Representative informing about anything not with honesty.	7.8%	18.2%	7.8%	46.8%	19.5%	2.4805	1.2055
The Medical sales Representatives mostly concerned in serving their benefit during visit.	15.6%	51.9%	10.4%	9.1%	10.0%	3.4805	1.2419
The Medical Sales Representatives don’t look like to think about what you want.	2.6%	28.6%	6.5%	50.6%	11.7%	2.5974	1.10388
Most of your colleague’s doctors don’t generally belief Medical Sales representatives.	2.6%	18.2%	10.4%	59.7%	9.1%	2.4545	0.9806
The Medical Sales Representatives Usually unreliable during visit.	2.6%	48.1%	7.8%	33.8%	7.8%	3.0390	1.1173
Average						3.0522	

*Scale of 5 to 1 (SA = strongly agree, A = Agree, N = Neutral, DA = Disagree, SDA = Strongly Disagree).

Mostly Physicians agree with the statement that MR visits me are honest but, in some cases, they lie to me during visits because of their interest and therefore when we see the average in table 5.6.1 we can say that according to their interest they lie as well in some cases but also work with

honesty.

5.6.2 Medical Representative behavior in visits to Physicians

The 2nd objective to determine the behavior of medical representatives that how they represent their products to the customer, how they discuss the competitor with physicians.

The findings are in Table 5.6.2

Table 5.6.2	Medical Representative behavior in visits to Physicians						
	SA	A	N	DA	SDA	Mean	Std. Deviation
The Medical sales Representatives that call me often misrepresented analysis about drugs.	11.7%	16.9%	11.7%	44.2%	15.2%	2.6494	1.2645
The Medical sales Representatives blame others for their blunder.	10.4%	33.8%	19.5%	32.5%	3.9%	3.1429	1.1087
The Medical sales Representatives usually are not honest when they give information about the adverse effect of drugs.	6.5%	19.5%	9.1%	58.4%	6.5%	2.6104	1.0749
The Medical Sale Representatives usually take advantage of inexperienced doctors during visit	15.6%	51.9%	10.4%	9.1%	10.0%	2.6249	1.1125
The Medical sales Representatives meet me as a rule don't make me favoritism so to supposed thankful towards them.	3.9%	24.7%	14.3%	44.2%	13.0%	2.6623	0.9507
The Medical Sales Representatives that meeting me frequently advance medications with a probability of expanded results.	10.4%	57.1%	15.6%	14.3%	2.6%	3.5844	0.9806
The Medical sales Representatives that meeting me generally misrepresent while introducing the advantages of another medication.	7.8%	75.3%	7.8%	7.8%	1.3%	3.0390	1.1173
Average						2.9019	

*Scale of 5 to 1 (SA = strongly agree, A = Agree, N = Neutral, DA = Disagree, SDA = Strongly Disagree).

Mostly Physicians agree that the MR behavior regarding the representation of drugs, side effects of drugs, knowledge about competitor products,

new products in the market, is good and also the average support Medical representative overall behavior.

5.6.3 Medical Representative code of ethics

The 3rd objective to determine the code of ethics of medical representatives that how they represent their company rules and regulation in the physician's chamber, how they discuss the medicine market scenario with physicians. The findings are in Table 5.6.3.

Table 5.6.3	Medical Representative code of ethics						
	SA	A	N	DA	SDA	Mean	Std. Deviation
The Medical sales Representatives that call me normally are not full fair concerning the adequacy of the number of medications in the marketplace	9.1%	35.1%	9.1%	44.6%	2.6%	3.0390	1.12906
The Medical sales Representatives met me typically make terrible comments about their competitor.	6.5%	36.4%	14.3%	40.3%	2.6%	3.0390	1.06920
The Medical sales Representatives that met me ordinarily are intrigued just for their own benefit and not for me.	7.8%	31.2%	7.8%	15.6%	44.6%	3.0130	1.04496
The Medical sales Representatives that call me when asked ordinarily answer even though are not sound acquainted with the subject matter.	7.8%	53.2%	10.4%	20.8%	7.8%	3.3247	1.12906
The Medical sales Representatives that call me frequently give deluding data if their opposition is available.	5.2%	22.1%	16.9%	51.9%	3.9%	2.7273	1.02130
The Medical sales Representatives that meeting me are typically compelling me to guarantee the prescription of their organization.	11.7%	36.7%	16.9%	36.7%	1.0%	3.2468	1.06568

The Medical sales Representatives that visit me regularly build proposals that negate the rules of Ethics of pharmaceutical organizations.	1.0%	13.1%	9.1%	49.4.8%	13.0%	2.1688	1.04381
Average						2.9369	

*Scale of 5 to 1 (SA = strongly agree, A = Agree, N = Neutral, DA = Disagree, SDA = Strongly Disagree).
 The average is 2.9369 which mean is most of the physicians agree that the medical representatives care about their customer and follow organization rules and regulation and work with

ethics.
5.6.4 Collaboration of Medical Representative with physicians

The 4th objective to determine the relation of medical representatives with physicians that how useful they are for doctors and how they support physicians. The findings are in Table 5.6.4.

Table 5.6.4	Collaboration of Medical Representative with physicians						
	1.SA	A	N	DA	SD	Mean	Std Deviation
	2.VG	G	N	B	VB	Mean	Std Deviation
	3.VU	U	NI	A	VA	Mean	Std Deviation
1.I consider the Medical Representatives valuable accomplices	23.4%	50.6%	7.4%	13.0%	5.2%	3.7403	1.1168
2.As a rule how might you portray your relationship with the medical Representatives that visit you	23.4%	36.4%	11.7%	20.8%	7.8%	3.4675	1.2704
3. How would you characterize the calls Of Medical Representatives visit you	6.5%	49.4%	3.9%	24.7%	15.6%	3.0649	1.2808
Average						3.4242	

1. Scale of 5 to 1 (SA = strongly agree, A = Agree, N = Neutral, DA = Disagree, SDA = Strongly Disagree).
 2. Scale of 5-1 (VG for Very good, G for Good, N for Neutral, B for Bad, VB for Very bad).
 3. Scale of 5-1 (VU for Very useful, U for Useful, NI for Not interest, A for Annoying, VA for Very annoying).
 The average is 3.4242 which mean most physicians see their relationship as good with medical representatives and their visits to them consider useful.

5.7 Structural model/Hypothesis Testing
 To test the hypotheses, we tend to run a bootstrapping procedure with a rate of 5,000 (Hair et al., 2017) to get the t values, p values, and bootstrapped confidence intervals. The results area unit shown in Table 5.7.1
 We tested 3 hypotheses, as shown in Table 5.7.1, each of them was found to be important. i.e., Medical Representatives honesty MRH>RMRP ($\beta = .236, t = 2.395, p < .002$) with f^2 of .036 and Medical Representatives behavior MRB>RMRP ($\beta = .268, t = 3.356, p < .003$) with f^2 of .028and

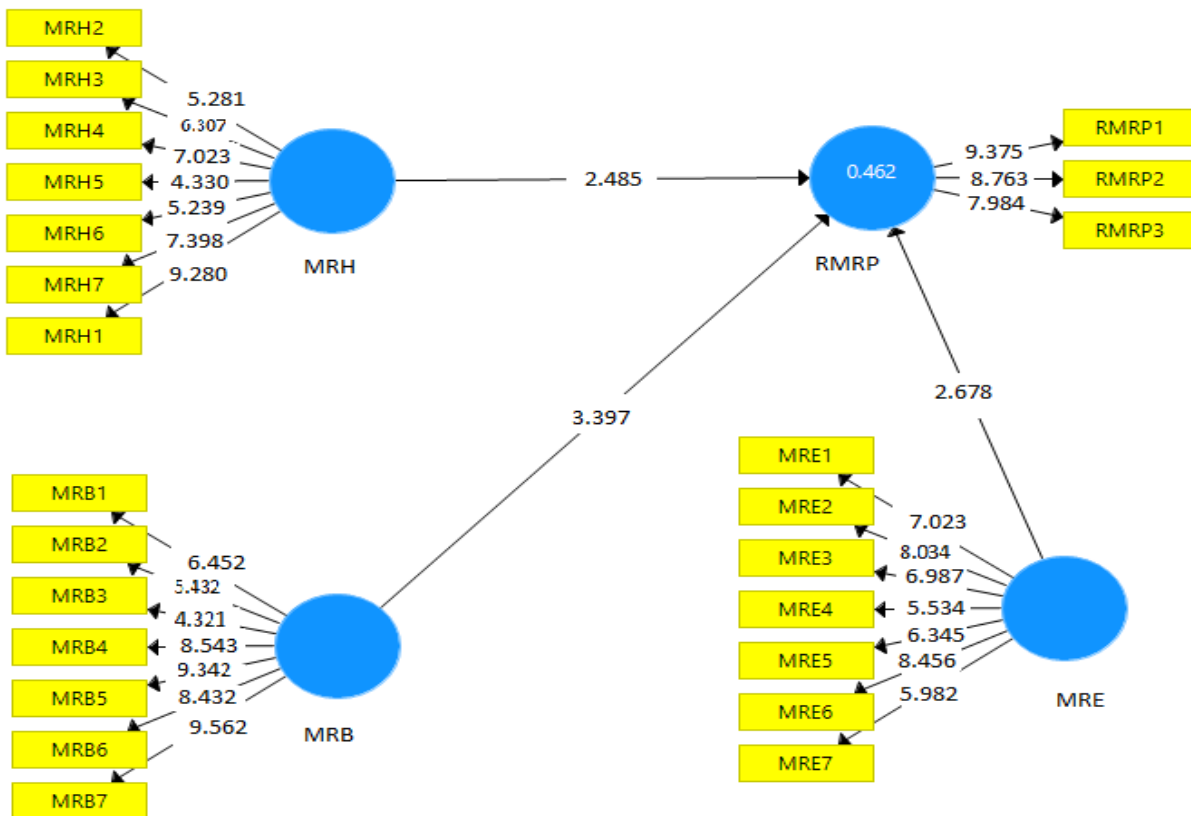
MRB>RMRP ($\beta = .276, t = 2.054, p < .004$) with f^2 of .046 were significant. Thus, both hypotheses were supported. The R^2 was .342, which indicates that 34.3% of the variance in the relation of MR with Physicians are often explained by the constructs projected through this model. The connection is influenced by several alternative factors, however as we've targeted on MR work, R^2 ought to be high. Moreover, R^2 is dependent on the research criteria. (Hair et al., 2017). We additionally tested prognosticative connexion on applying the blindfolding procedure with

associate degree omission distance of 8; the Q^2 value was .13, and since the worth is larger than zero. (Fornell & Cha, 1994), we will make sure the analytical relevancy of the model. Also, the SRMR value in PLS-SEM is considered for the model fit (Ray et al., 2016) were estimated. The value for SRMT which is lower than 0.08 is acceptable for PLS-SEM (Ray et al. 2016). The results have shown the SRMR model fit values of 0.061 and 0.035 for the Saturated and Estimated model, respectively.

Table 5.7.1 Hypothesis testing

Hypothesis	Relationship	SDBETA	SDERROR	lacking t	Values p.	values ^{f2}
H1	MRH>RMRP	.236	0.115	2.395	0.002	0.036
H2	MRB>RMRP	.268	.203	3.356	0.003	0.028
H3	MRE>RMRP	.276	0.117	2.054	0.004	0.046

Figure 1 Structural Equation modeling (bootstrapping)



6.0 Discussion

We report that there is a far and wide connection

between the Pharma business and doctors Inter-activities are as close to home interchanges,

unconditional presents, for example, drug tests, supported dinners, supported gathering travel, subsidizing for exploration and CMEs and honoraria. The recurrence of these co operations is similar among inhabitants and doctors.

Be that as it may, the sum and kind of blessings shift with the position of the doctor in the clinical progressive system, specialization and area of training. As a rule, learners (inhabitants and assistants) are treated with more medication tests, writing material things and free dinners than senior doctors. Senior doctors ordinarily profit from supported meetings/trips, research financing, honoraria and CME occasions. The degree of these co operations shifts with scholastic versus non-scholarly foundations: non-scholastic clinics record a greater number of associations than others. Most of the doctors don't accept that they are influenced by PSR collaborations. In any case, a sizeable rate in different overviews reacted in the certifiable when found out if they believed that their friends are defenseless.

6.1 Strength and limitation of the study

A significant strength of this examination is that it is an enormous, forward-thinking methodical audit of studies investigating the impacts of doctor and drug industry delegate collaborations and occupants in various settings (eg, scholarly and essential consideration). Another strength of this examination is the utilization of Cochrane and GRADE philosophies for leading an audit and surveying the nature of the investigations. Additionally, we played out a broad pursuit of three information bases and dim writing. A portion of the constraints of this survey is identified with the included examinations, as some didn't give proof to the essentialness of their discoveries or had differing study plans and results, which made it difficult to direct a meta-analysis. Likewise, the included investigations were liable to a chance of inclination identified with the absence of legitimacy of result estimation and deficient treatment of critical possible confounders.

6.2 Future implications

The pharmaceutical industry and PSR co operations bargain the objectivity of the doctors. Teaching doctors and expanding guidelines of the drug industry and PSR connections may bring down the probability of recommending new non-prevalent industry medications and nonsensical medicine conduct. Further investigations are needed to assess the effect of the drug industry and PSR communications on doctors over the long run and the advantages of different bury venation put together schooling programs concerning the clinical and moral conduct of the doctors.

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