# Mediating Role of Emotional Intelligence on the Link of Physician Empathy and Patient Satisfaction; A Survey Related Study in the Northern Area Punjab

by

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#### **Abstract**

Physician empathy means understanding the concern, experience, and perspective of patient. The link of empathy behavior satisfaction helps patients to fight against diseases. Further the existence of emotional intelligence knowledge in physician strength the relationship between patient satisfaction and physician empathy. The current study measures weight, association, and cause and effect between physician empathy and patient satisfaction with the mediating role of emotional intelligence. The finding of this study that there is a positive relationship between physician empathy and patient satisfaction and the role of emotional intelligence strength the link of physician empathy and patient satisfaction. The finding of the student help to medical institute and similar line of study.

**Keywords:** Physician Empathy ,Patient Satisfaction, Emotional Intelligence

#### **Introduction:**

Patient satisfaction is the key component of the patient to recover and get outcome. Patient satisfaction is an important and key dimension in the health unit. A complete treatment and physician cooperation enhance patient satisfaction. A patient linked to emotional health a long waiting, involvement in the decision, and expectation of patient are linked with a physician (Hageman et al., 2015; Calderon et al., 2008). Empathy is to understand the feelings, thoughts, and attitudes of others, it is an essential component of the relationship between physician and patient

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(Kim et al., 2014). In another way, we can say physician empathy can understand the concerns, experiences, and perspectives of patients, to communicate with a warm and passionate manner (Hojat, 2007). The hope of the patient to recover and avoid despair is the main concern of physicians to develop in patients that lead to satisfaction (Lelorain, et al., 2012). Emotional Intelligence physician understands own feeling and other feeling and then discriminate and use in to keep the best relation of understanding. In this study to examine the relationship between physician Empathy and patient satisfaction, and Emotional Intelligence role in the link between physician empathy and patient satisfaction. This study guide the related medical field, and concept about emotional intelligence, physician empathy, and patient satisfaction.

# **Physician Empathy:**

Physician empathy is the ability to understand the emotion of the patient. It is not just ability to understand but an ability to show care towards the patient (Abdellatifet al., 2017). Physician empathy has the ability to understand the experience, interest, and perspective of patients joined with the power to interact (Ali, 2019; Hijat, 2007). Physician empathy depends on emotional skills and is not beneficial for patient but also beneficial in other matters of life. Emotional skills concern the capacity to refer to and process emotional circumstances. Those physicians who have empathetic behaviour, they understand individual emotions, and express emotions in way that impacts the health of the patient. The patient's satisfaction level become higher when he is empathetically treated by the physician. According to this, an empathic acknowledging of physicians can gain effects having different positions and the patients feel comfortable to tell the details about their interests and symptoms (Herzing et al., 2006).

# **Patient Satisfaction:**

Patient satisfaction is to evaluate the patient engagement and essential measure to take to diagnose the patient chest pain and about the diseases (Rydman et al., 1997). Patient satisfaction is a good indicator for the patient, and it is the instrument and interpersonal aspect of care. The older patient needs special care usually they suffering many chronic conditions, at that time the satisfaction of the patient becomes higher when the physician shows empathic behavior, respect and takes interest in the older patient personal problems (Zisberg et al., 2015). There are many dimensions that can be taken as attributes of Patient Satisfaction like the value of patients, beliefs, previous health care experiences, expectations, and socio-demographic factors. Patient's satisfaction is based on the needs and the expectations of individuals with respect to healthcare services. It is important to know what is the desire and importance of the patient. Usually patient satisfaction depends on care, physician time, and hospital care (Christensen et al., 2009).

# **Emotional Intelligence:**

Emotional intelligence is the concept that belongs to the psychological field, take much space in the field of mental health care. Basically emotional intelligent people are those who adjust themselves according to other emotion, In other words of explanation, it is the set of skills that help to better understand own and other feelings. Many models of emotional intelligence which is the ability model given by Mayer and Salovery and mixed models given by Goleman and Bar-on. It is the set of abilities like intelligence that process emotional information, understanding, expressing correctly and using information and managing (Mayeret al., 2000). Emotional Intelligent is a predictive factor of depression and mood disorder, and Emotional Intelligent is

essential for success in life and psychological health. Emotional Intelligent plays a vital role in shaping the interaction between the environment and individual Parihar and Jha (2015). Emotional Intelligent has a significant relationship between emotional intelligence and life satisfaction and in another study Emotional Intelligent has a relationship between depression (Abdellatifet al., 2017).

# **Empirical Literature Review:**

An empathetic behavior person needs personal courage and resources to involve himself in someone else emotion to understand, It can be learned through practice and training, empathy is not an essay task (Stein, 2009). The ability of physicians to show empathy behavior is not unsurprisingly, it the benefits of both patient and physician. studies showed that there is a direct influence of physician empathy on patient satisfaction and directly influence (Garcíaet al., 2013; Kimet al., 2004). In Emotional Intelligence, empathy is the attribution of EI that influence patient care. This is the ability to understand emotion and as well as self-emotion and understand the emotion as per emotional knowledge and then cope with environmental demands and pressures(Birks& Watt, 2007). Emotional intelligence ability is vital to enhance the level of the physician to understand the level of the patient's emotion and further enhance the level of his emotional intelligence skills during the treatment. An individual who shows a high level of emotional intelligence make good and effective decision making (Ivcevic et al., 2007). A high level of physician empathy Behavior may enhance patient satisfaction and the treatment of the patient result will be a better outcome (Kimet al., 2004). The level of empathetic behavior not only beneficial for the patient but also beneficial for the physician. The physician's emotional intelligence affects the patient and also outcomes, sometimes that is more important a level of ignorance, particularly at the time when empathic behavior needed, that time ignorance behavior affects patient satisfaction (Cherry et al., 2014).

# **Hypotheses:**

- H1. Physician Empathy and Emotional Intelligence are significantly associated with the Patient Satisfaction.
- H2. Physician Empathy and Emotional Intelligence significantly explain the variation in the criterion of Patient Satisfaction.
- H3. Emotional Intelligence significantly mediates between Physician Empathy and Patient Satisfaction.

# Research Design, Sample and Procedure:

In this research, IV is Physician Empathy and DV is Patient Satisfaction and the mediating role is Emotional Intelligence. Under the 'Positivist' philosophy of social research, knowledge is a verifiable entity. The researcher extracted the model of the topic from the literature assuming it as an established model of knowledge and then verified it from the first-hand data from the field survey. Statistical tools have been used to test the hypotheses about different aspects of the knowledge on the topic (Bhattacherjee, 2012). For quantitative data, statistical procedures have been applied including the mediation model of Baron and Kenny (1986) besides correlation and regression analysis. The data collected from 250 Doctors, Nurses, and ICU wards Medical

Members in the Northern area in Punjab province both. Data collected from the participant through a structural questionnaire.

# **Research Results:**

**Table 1 Descriptive Results** 

	N	Minimum	Maximum	Mean	Std. Deviation
PE	250	3.24	5.78	4.3798	.58205
PS	250	3.11	6.74	4.8468	.63258
EI	250	3.35	6.45	4.7645	.62795

The descriptive results show that the mean and Standard deviation values of physician empathy, Patient satisfaction and emotional intelligence respectively are 4.3798, 4.8468 and 4.7645. Std Dev value .58205, .63258 and .62795. The Maximum values of physician empathy, Patient satisfaction and emotional intelligence respectively are 5.78, 6.74 and 6.45. The Minimum values of physician empathy, Patient satisfaction and emotional intelligence respectively are 3.24, 3.11 and 3.35. The total number of participants participated in this study is 250.

**H1**. Physician Empathy and Emotional Intelligence are significantly associated with the Patient Satisfaction

**Table 2 Physician Empathy and Emotional Intelligence** 

		PE	EI	PS				
PS	Pearson Correlation	.616**	.790**	1				
	Sig. (2-tailed)	.000	.000					
	N	250	250	321				
**. Correlation is significant at the 0.01 level (2-tailed).								

**Analysis:** Physician Empathy and Emotional Intelligence are significantly associated with the Patient Satisfaction, therefore, H1 is substantiated and accepted as established.

**H2**. Physician Empathy and Emotional Intelligence significantly explain the variation in the criterion Patient Satisfaction

**Table3 Multiple regression** 

	Model Summary										
M	Model R R Square		Adjusted R Square Std. Error of the Estimate		F	Sig	g.				
	1	.825a .681		.676	.62972 145.915		.000a				
				Coeff	ïcients						
M	Model		Unstandardized Coefficients		Standardized Coeffici	t	Sig.				
			В	Std. Error	Beta						
1	1 (Constant		.458	.148			3.084	.002			
	PE		.861	.092	.579		9.316	.000			
	EI	EI .455 .087		.327	5.258	.000					
	a. Predictors: (Constant), PE,EI b. Dependent Variable: PS										

**Analysis**: Multiple regression suggests that Physician Empathy and Emotional Intelligence are significantly explaining the variation in the criterion variable of PS. So H2 is accepted as true.

**H3**. Emotional Intelligence significantly mediates between Physician Empathy and Patient Satisfaction

# Computing 'a':

As per Baron & Kenny (1986) model for mediation, path-a connecting predictor and mediator must be significantly linked. Computations confirm this relations in the following table.

**Table 4 Computations** 

	Model Summary (Computing Path-a)										
Model R		R	R Square	Adjusted R Square	Std. Error of	ANOVA					
					the Estimate	F	Sig.				
	1	.706a	.498	.497	.43133	.000b					
	Coefficients										
Mo	Model		Unstandardized Coefficients		Standardized C	Coefficients	t	Sig.			
			В	Std. Error	Beta	l					
1	1 (Constant)		1.243	.201			6.185	.000			
	PE		.813	.046	.706	·	17.797	.000			
	a. Dependent Variable: EI b. Predictors: (Constant), PE										

# Computing 'c' 'ĉ' & 'b':

**Table 5 Computations** 

	Model Summary (Computing Path-b, c, &ĉ)												
M	od	R	R2	Adj.R2	SE	SE Change Statistics					A	NOVA	
						R2	F	df1	df2	Sig.F	F	Sig.	
	1	.606a	.367	.365	.47856	.367	184.995	1	249	.000	184.995	.000b	
2	2	.793b	.628	.626	.36733	.261	223.421	1	248	.000	268.702	.000	)c
	Coefficients												
Mo	Model		Unstandardized Co		oefficients		Standardized Coefficients			t	Sig.		
				В		Sto	Std. Error Beta						
1	(Co	onstant)		1.806			.223				8.097	.000	
	PE [c] .689			.051	.606		13.601	.000					
2	(Constant) .920		.181			5.077	.000						
	PE	PE [ĉ] .110			.055 .097		.097		2.002	.046			
	EI [b] .713			.048 .721		.721		14.947	.000				
	a. Dependent Variable: PS b. Predictors: (Constant), PE c. Predictors: (Constant), PE, EI												

**Analysis**: R2 has changed from .367 to .628 with .261 change which is verified by some support from EI to strengthen the link between PE and PS. Further, 'c' has reduced from Beta = .689 (c) to .110 ( $\hat{c}$ ) with addition of B = .713 from EI (b). Since the p-value of  $\hat{c}$  = .046, which is close to .05, therefore H3 is accepted with full mediation.

#### **Discussion and Conclusion:**

Health care is important for a good satisfying life. A person only enjoys health when he feels physically and psychologically fit, But in life ups and downs comes that may affect an individual physically and psychologically life. A person becomes poor in health. So he needs a physician to suggest his health prescription and motivate him to fight against the physical and psychological issues in health. Patient satisfaction linked with physician empathy in and outside

the hospital. patient satisfaction associated with the physician empathy 61%. This means a little empathy for physician brings a change in patient satisfaction. The intervention of emotional intelligence in the link of physician empathy and patient satisfaction becomes strengthen. A psychological understanding of physicians regarding patients brings an emotional change. The different studies support our empirical results the study of (Shea et al., 2007) showed that physician empathy and patient satisfaction positively associated. Empathy can be taught and improved through interventions (Riess et al., 2011).

#### References

- Abdellatif S.A., Hussien E-SS., Hamed W. E., Zoromba M. A. (2017). Relation between emotional intelligence, socio-demographic and clinical characteristics of patients with depressive disorders. *Arch PsychiatrNurs*; 31:13–23
- Ali, M. (2019). Effect of Spiritual Intelligence on Effective Change Management: A Review of Selected Researches, *Electronic Research Journal of Social Sciences and Humanities* 1 (I), 30-47
- Birks, Y. F., Watt. I. S. (2007). Emotional intelligence and patient-centered care. *JR Soc Med*; 100: 368-74.
- Cherry, M. G., Fletcher, I., O'Sullivan, H., Dornan, T. (2014). Emotional intelligence in medical education: a critical review. *Med Educ.*; 48 (5):468–78.
- Christensen, K., Doblhammer, G., Rau, R., Vaupel, J.W. (2009). Ageing populations: the challenges ahead. *The Lancet*;374.
- García, D., Bautista, O., Venereo, L., Coll, O., Vassena, R., Vernaeve, V. (2013). Training in empathic skills improves the patient-physician relationship during the first consultation in a fertility clinic. *FertilSteril*; 99: 1413-8.
- Hageman, M. G., Briet, J. P., Bossen, J. K., Blok, R. D., Ring, D. C., Vranceanu, A. M. (2015). Do pre-visit expectations correlate with satisfaction of new patients presenting for evaluation with an orthopedic surgical practice? *Clin OrthopRelat Res.*; 473(2)
- Herzig, S., Biehl, L., Stelberg, H., Hick, C., Schmeißer, N., Koerfer, A. (2006). What makes a good doctor? A content analysis of assessments by a sample of doctors. *Dtsch Med Wochenschr*; 131: 2883–8.
- Hojat, M. (2007). Empathy in Patient Care: Antecedents, Development, Measurement, and Outcomes, Springer, New York.
- Hojat, M., Louis, D. Z., Markham, F. W., Wender, R., Rabinowitz, C., Gonnella, J. S. (2011). Physicians' empathy and clinical outcomes for diabetic patients. *Acad Med.*; 86(3):359–64.
- Ivcevic, Z., Brackett, M. A., Mayer, J. D. (2007). Emotional intelligence and emotional creativity. *J Pers*; 75: 199-235.

- Kim, S.S., Kaplowitz, S., Johnston, M.V. (2004). The effects of physician empathy on patient satisfaction and compliance. *Eval Health Prof.*; 27(3): 237-251
- Korsvold, A.V., Mellblom, H.C., Lie, E., Ruud, J.H., Loge, A. (2016). Finset, Patient-provider communication about the emotional cues and concerns of adolescent and young adult patients and their family members when receiving a diagnosis of cancer, *Patient Educ. Couns.* 99: 1576–1583
- Lozano Calderon, S. A., Paiva A, Ring, D. (2008). Patient satisfaction after open carpal tunnel release correlates with depression. *J Hand Surg Am*; 33(3):303-307
- Mayer, J.D., Salovey, P., Caruso, D. R. Models of emotional intelligence. *RJ Sternb* 2000: 396–420
- Neumann, M., Bensing, J., Mercer, S., Ernstmann, N., Ommen, O., Pfaff, H. (2009). Analyzing the "nature" and "specific effectiveness" of clinical empathy: a theoretical overview and contribution towards a theory-based research agenda. *Patient Educ Couns*; 74:339–46.
- Parihar, N., Jha, M. (2015). Role of emotional intelligence, gender and culture in depression. *J Hum S Sci*; 20: 33–6
- Riess, H., Kelley, J. M., Bailey, R., Konowitz, P. M., Gray, S. T. (2011). Improving empathy and relational skills in otolaryngology residents: a pilot study. *Otolaryngol Head Neck Surg.*; 144 (1):120 122
- Rydman, R. J., Zalenski R. J., Roberts R. R., Albrecht G. A., Misiewicz V. M., Kampe L. M. (1997). Patient satisfaction with an emergency department chest pain observation unit. Ann Emerg Med; 29 (1): 109–15.
- Shea, J. A., Guerra, C. E., Ravenell, K. L., McDonald, V. J., Henry., C. A., Asch, D. A. (2007). Health literacy weakly but consistently predicts primary care patient dissatisfaction. Int J Qual Health Care.; 19(1): 45 49.
- Stusser, S., Davis, R. M. (1990). Measuring patient satisfaction for improved patient services. Ann Arbor: Health Administration Press
- Weng, H. C., Steed, J. F., Yu, S. W., Liu, Y. T., Hsu, C. C., Yu, T. J. (2011). The effect of surgeon empathy and emotional intelligence on patient satisfaction. *Adv Health Sci Educ Theory Pract*; 16: 591–600.
- Zisberg, A., Shadmi, E., Gur-Yaish, N., Tonkikh, O., Sinoff, G. (2015). Hospital-associated functional decline: the role of hospitalization processes beyond individual risk factors. J Am Geriatr Soc; 63 (1): 55-62.