Information Asymmetry a Correlate of Customer Dissatisfaction as perceived by Parents of Secondary School Students

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Abstract

Paper attempts to find relation between information asymmetry and customer dissatisfaction among parents of secondary school students. The measures used for data collection were developed by the investigator himself. Findings are based on percentage analysis and correlation analysis. Percentage analysis was intended to explain the magnitude of the variables under study as perceived by parents of the students. It revealed that parents are not much concerned about information asymmetry irrespective of attribute variables-Gender, Locality and Level at which their ward/s study. Similar result has been found in respect of variable customer dissatisfaction. But it has been found that parents are much more aware about customer dissatisfaction in comparison to information asymmetry. It may be due to the fact that customer satisfaction is well known and felt measure where as information asymmetry is implicit in nature. In correlation analysis author found that across all the attribute variables a significant correlation has been found between information asymmetry and customer dissatisfaction. This implies that information asymmetry contribute to the customer dissatisfaction. Finally author feels that results are unexpected and half concluded, could be better studied with some indirect instruments of data collection and using bigger sample size. Nevertheless study could highlight that still parents are not matured enough to use the customer right for transparent and accountability in respect of school services for their wards.

Key Words: information asymmetry, customer dissatisfaction, accountability, customer right in education, customer rights in school

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International Journal in Management and Social Science

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Education has been changing face from times in memoire. In the times of Aristotle and Socrates being virtuous was being educated. Later on it could be described as being skilled is being educated and now being qualified is being educated. Also it started as charity changed to an entrepreneur and now a saleable commodity. Student and hence parents pay price for it and teacher draws handsome salary for his hard work and schools are run for profit like an industry. In an industry the accountability is a vital issue which now becomes automatically applicable to the schools. The accountability can most easily be addressed by keeping the customers satisfied which in turn depends upon the transparency in the working of the school. When there is sizable amount of information asymmetry the transparency is hard to come by. The investigator became interested how do parents perceive about the issue, do they associate the two variables (information asymmetry & customer dissatisfaction) or not?

Information symmetry/asymmetry is the concept originated in the field of economics, finance, management and strategic decision making. But it has been borrowed to and extensively applied to other branches like health science, social sciences including education. In fact in all sorts of decision making information symmetry is so important that it makes a subject of study in respect of all the stake holders. Education is an entrepreneur where school and parents take decisions on behalf of the child regarding number of issues which affect directly or indirectly all the stakeholders involved. More the stakeholders (both external and internal) are involved in the decision making more transparent a decision will be. For transparency we need to maintain information symmetry i.e. two or more parties involved in the decision making should be equally informed. It is expected that in case there is lack of information symmetry, it causes customer dissatisfaction, which makes subject of study for present paper.

Information asymmetry has been defined number of ways some of theses definitions are presented here.

In economics and contract theory, information asymmetry deals with the study of decisions in transactions where one party has more or better information than the other. This creates an imbalance of power in transactions which can sometimes cause the transactions to go awry. Examples of this problem are adverse selection and moral hazard. *(http://en.wikipedia.org/ wiki/Information asymmetry)*

The difference in the amount of information available to the various parties to a transaction which does not place them on equal footing to strike a deal.

(*http://www.emro.who.int/mei/mep/Healthsystemsglossary.htm*)

A situation involving information that is known to some, but not all, participants. *(http://biz.yahoo.com/glossary/bfglosi.html)*

Condition in which at least some relevant information is known to some but not all the parties involved, information asymmetry causes markets to become inefficient, since all the participant do not have access to information they need for their decision making processes, opposite of information symmetry. *(www.investorswords.com)*

Situation that favors the more knowledgeable party in a transaction. In most markets (especially where the goods being traded are of uncertain quality, such as used equipment), a seller's is usually in a more advantageous position because his or her store of information is based on numerous sales conducted over the years. A buyer's information, however, is based usually on an experience of only a few purchases. A similar situation exists between a commercial lender and a borrower. *(www.businessdictioary.com)*

From above given definitions one can make out that Information Symmetry is-

- a market driven economic phenomena, where extent is measured in terms of monitory gain or loss,
- involves imbalance of information in an agreement, which can have serious implication,
- term which involves breach of moral standards in transaction of goods or services,
- a phenomena which decides social relationship between the firm/ supplier/ service provider and the customer/ client/ consumer.

Customer Dissatisfaction

Customer is most important person in any business involving products or services. When an entrepreneur just focuses on monitory benefits, is actually loosing the real sight of success. As businesses are investments oriented which later on gives enough returns. In case it is product industry we need to invest on product as well as on customer, but in case of a service industry the customer is most important for investment. Education is also a service industry where students and parents are immediate and external customers. School need to satisfy the customers with quantity & quality of offered services in return of the money they spent. In the present sense of market driven education customer satisfaction would be the critical key indicator of performance of any school. When school is focused on taking care of its customers' best interest and ensures that they are delivering the most

effective level of service, innovative solutions that bring value to its customer base, showing result in terms of tangible and non tangible sense.

Anything done against the said spirit would be termed as customer dissatisfaction. It is difficult to understand what satisfies the customer but it is very obvious which dissatisfies the customer. In case of a school parents not only looks quality service in terms of academic result, there are many more issues in it. They want be consulted for decisions affecting their wards, need to be informed on learner's progress towards goals or lack of it need to be respected when they visit the school, procedures and rules should respect their identity and their opinion should be valued. Finally we can say school needs to know what it takes to satisfy its customers before it can do it well…take time to ask them, listen and understand their answer and act on it.

Objectives of the Study

- To construct and standardize a measure to assess the extent of information asymmetry exists between customer (parents) and service provider (school).

- To construct and standardize measure to assess the extent of customer dissatisfaction exists among customers in respect of services provided or not provided by the school.

- To analyze the extent of information asymmetry exists among customers with respect to attribute variables.

- To analyze the extent of customer dissatisfaction exists among customers with respect to attribute variables.

- To analyze the extent of relatedness exists between information asymmetry and customer dissatisfaction as perceived by parents of secondary school students.

- To interpret the statistical numbers obtained from raw scores for inferences and educational significance.

Hypotheses of the Study

H_1 Information asymmetry is significantly related to customer dissatisfaction as perceived by parents of senior secondary school students.

H_2 Information asymmetry is significantly related to customer dissatisfaction as perceived by parents of senior secondary school students in respect of attribute variables.

H_3 There is no significant difference of relatedness between information asymmetry and customer dissatisfaction as perceived by parents of students across attribute variables.

Methodology

Study falls in survey type category and data was collected for two variables (information asymmetry & customer dissatisfaction) using self developed and standardized measures. The data has been analyzed using percentage and correlation analysis.

Research Tools

Two questionnaires were constructed and standardized for data collection purpose. These are

- Information Asymmetry Assessment Measure (Parents Form)
- Customer Dissatisfaction Assessment Measure (Parents Form)

Steps for development and standardization of two measures

- Theoretical Constructs for the concept
- Framing of items
- Selection of items
- Organization of items
- Distribution of items
- Structure of Questionnaire
- Try out of Questionnaire
- Establishing Reliability of the Questionnaire
- Establishing Validity of the Questionnaire

   Table 1: Measures Reliabilities

Questionnaire	Half Length Reliability	Full Length Reliability
Information Asymmetry (Parents Form)	.68	.81
Customer Dissatisfaction (Parents Firm)	.59	.74

The calculated values show that the prepared questionnaires are reliable measures to assess the variables taken under present investigation.

Establishing Validity of the Measures

Mouley (1970) stated "At the most elementary level, it is necessary for all the questionnaires to have content validity. In questionnaire each question must be related to the topic under investigation. There must be an adequate coverage of the overall topic; the questionnaire must be clear and unambiguous". "A more adequate approach to validation consists of checking agreement between responses obtained by the questionnaire against criterion".

For adequate coverage of topic and content validity, the subject is covered by understanding the concept in terms of constructs extracted from related literature. The clarity and ambiguity of questions were dealt by (a) taking expert's opinion and (b) try-out. The testing of agreement against criterion is not easy when we are using questionnaire as somewhat like opinionative (as is the case in present study) reason being objective criterion is not available.

The problem was solved by selecting ten subjects (parents) of the covered sample on random basis and were interviewed von same statements. Their verbal responses matched to their questionnaire responses up to nearly 80% in respect of both the measures which ensured validity of the two measures.

Sample for the Study

A snow ball sample of hindered ten parents of secondary school students constituted the sample. However it was partially purposive to include sufficient numbers in respect of selected attribute variables.

Percentage Analysis

Percentage analysis has been done for both Information asymmetry and Customer dissatisfaction measures. The percentage analysis has been done to reveal the magnitude of the variables. The significance of the measure has been ascertained by comparing the two percentages for significant difference. The two percentages are maximum percentage (100) and the observed percentage. If the difference found is significant it means percentage itself is not significant and vice-versa.

Percentage Analysis for Information Asymmetry

Max. Score of Information asymmetry questionnaire = 72

Average score = 9.97

Percentage (P_1) = 10.68

To find the significance of percentage at 108 degree of freedom

P_1 = 10.68 P_2 = 100

$$P = \frac{N_1P_1+N_2P_2}{N_1+N_2}$$

$$= \frac{10.68 \times 55 + 100 \times 55}{55+55}$$

$$= 55.34$$

$Q = 100-P$

$= 100 - 55.34$

$= 44.66$

$$\sigma_{P1-P2} = PQ\sqrt{1 + \left(\frac{1}{N1} \quad \frac{1}{N2}\right)}$$

$$\sigma_{P1-P2} = 85.33 \times 14.67 \sqrt{1\left(+ \frac{1}{104} \quad \frac{1}{104}\right)}$$

$$= 9.48$$

$$C.R. = \frac{(P_1-P_2) - 0}{\sigma_{P1-P2}}$$

$$. = \frac{100 - 10.68}{9.48} = 9.42$$

Difference is significant at 0.01 level implies the percentage itself is not significant.

The same procedure is applied for groups across attribute variables and results are represented in Table 2

Table 2: Summary of Percentage Analysis for Information Asymmetry

Variable	N	P_1	P	σ_{P1-P2}	C.R. for Group%	Level of Significance
Male	29	9.97	54.99	13.07	6.89	significant
Female	26	7.92	53.96	13.09	7.03	significant
Urban	28	11.26	55.63	13.26	6.69	significant
Rural	27	6.58	53.29	13.58	6.88	significant
Juniors	27	9.00	54.5	13.55	6.72	significant
Seniors	28	8.93	54.47	13.31	6.84	significant
For Whole Measure	29	9.17	54.59	13.08	6.94	significant

All of the C R values has been found to be significant, implies none of the magnitude is actually significant.

Table 3: Summary of Percentage Analysis for Customer Dissatisfaction

Variable	N	P_1	P	σ_{P1-P2}	C.R. for Group%	Percentage Significance
Male	29	53.62	76.81	11.08	4.19	significant
Female	26	54.12	77.06	11.66	3.93	significant
Urban	28	54.02	77.01	11.24	4.09	significant
Rural	27	53.70	76.85	11.48	4.03	significant
Juniors	27	54.84	77.42	11.34	3.98	significant
Seniors	28	52.93	76.47	11.34	4.15	significant
For whole measure	29	52.78	76.39	11.15	4.23	significant

All C. R. values has been found to be significant; hence the magnitude itself is insignificant in respect of customer dissatisfaction.

Correlation Analysis

Product moment correlation between two measures has been calculated for different groups across attribute variables.

Table 4: Summary of Calculations of Correlation between Information Asymmetry & Customer Dissatisfaction Score for Parents of Students

Variable	Group	N	M_1	M_2	σ_1	σ_2	r
Information Asymmetry & Customer Dissatisfaction	Male	29	7.18	38.61	7.39	9.58	.43
	Female	26	7.92	54.12	6.83	10.38	.39
	Urban	28	8.11	38.89	7.98	10.60	.49
	Rural	27	4.74	38.67	5.69	9.29	.29
	Juniors	27	6.48	39.48	7.64	10.05	.47
	Seniors	28	6.43	38.11	6.67	9.88	.33
	All parents	29	6.60	38.00	7.13	10.00	.45

All the correlations are found to be significant on respective degrees of freedom.

Comparing 'r' across variables

Relatedness between two measures is compared by finding C. R using corresponding Z (Fisher value) for each r value.

Table 5: Correlation Analysis across Dichotomous Variables

Variable	Group	N	r	Z	σ_{P1-P2}	C.R.
Information Asymmetry & Customer Dissatisfaction	Male	29	.43	.46	.286	.18
	Female	26	.39	.41		
	Urban	28	.49	.54	.285	.84
	Rural	27	.29	.30		
	Juniors	27	.47	.51	.286	.59
	Seniors	28	.33	.34		

C. R is not significance for any of the variables.

Findings:

Percentage Analysis

- Percentage score in respect of Information Asymmetry of parents group has been fond to be non-significant for any of the constituent group i.e. Male, Female, Urban, Rural, juniors as well as for seniors. Also the percentage has been found to be insignificant for whole group.

- Percentage score in respect of Customer Dissatisfaction of parents group has been fond to be non-significant for any of the constituent group i.e. Male, Female, Urban, Rural, juniors as well as for seniors. Also the percentage has been found to be insignificant for whole group.

- When percentages are compared in respect of variables-Sex (male/female), Locality (urban/rural), and level of student (junior/senior) differences have been found to be insignificant for both the measures (information asymmetry & customer dissatisfaction).

- Magnitude of customer dissatisfaction measure is significantly greater than information asymmetry measure. It implies parents are much more concerned for their satisfaction in comparison to information asymmetry. This may be due to the fact that customer satisfaction is an implicit indicator for which parents are very much aware, where as information asymmetry is relatively implicit parameter for which parents may be ignorant as their right.

Percentage analysis highlights that parents don't see much information asymmetry, and are not dissatisfied with the school system being offered. There can be two reasons for it, either the schools are really transparent or they are ignorant of their right to disagree with the system. The investigator when approached the principals of the institutions for permission of data collection, no one was welcoming and were suspicious of purpose of such research. Parents also responded hopelessly for any possibility of improvement in the system. The result obtained however tells different story, this suggests that our society is still immature to express fearlessly for their rights and against encroachment of their rights. Also data gathering by using direct instruments like questionnaire for such sensitive issues has not worked well.

Correlation Analyses (Hypothesis Testing)

- Big difference between means of two measures indicates information asymmetry is very low as perceived by the parents; this however does not affect trends of scores among the two measures as confirmed by the 'r' value. The observed correlation value r=.45 has been found to be significant at 0.01 level of significance (r0.05=.188; r0.01=.245; df= 108). This implies that information asymmetry is at least one of the reasons for customer dissatisfaction in case of parents of secondary schools.

- The observed correlation value r=.43 has been found to be significant at 0.01 level of significance (r0.05=.250; r0.01=.325; df= 56). This implies that information asymmetry is at least one of the reasons for customer dissatisfaction in case of parents of male students of secondary schools.

- The observed correlation value r=.39 has been found to be significant at 0.01 level of significance ($r_{0.05}$=.273; $r_{0.01}$=.354; df= 50). This implies that information asymmetry is at least one of the valid reasons for customer dissatisfaction in case of parents of female students of secondary school students.

- The observed correlation value r=.49 has been found to be significant at 0.01 level of significance ($r_{0.05}$=.264; $r_{0.01}$=.342; df= 54). This implies that information asymmetry is at least one of the valid reasons for customer dissatisfaction in case of parents of urban students of secondary schools.

- The observed correlation value r=.29 has been found to be significant at 0.05 level of significance (r0.05=.268; r0.01=.348; df= 52). This implies that information asymmetry is at least

one of the valid reasons for customer dissatisfaction in case of rural students of secondary schools.

- The observed correlation value r=..47 has been found to be significant at 0.01 level of significance (r0.05=.268; r0.01=.348; df= 52). This implies that information asymmetry is at least one of the valid reasons for customer dissatisfaction in case of parents of junior students of secondary schools.

- The observed correlation value r=.33 has been found to be significant at 0.05 level of significance (r0.05=.264; r0.01=.342; df= 54). This implies that information asymmetry is at least one of the valid reasons for customer dissatisfaction in case of parents of senior students of secondary schools.

- The comparison of relatedness between two measures (information asymmetry and customer dissatisfaction) across attribute variables- Gender, Locality and Level of their ward revealed that no C.R has been found to be significant. It implies attribute variables under investigation have no effect on the relatedness between the two measures.

Educational Significance of the Study

Although the present study has been conducted on small scale it highlighted some important features of parents' behaviour when education is supposed to be a sailable commodity. The approach of parents looks casual even when they are paying for the service. As a matter of fact that we all understand that there is lot of information asymmetry in customer school relationship, still results obtained are contrary to it. There is one good thing in it is that people in India still consider education a pious venture and don't doubt the intention of school managements, but then how they will made accountable to the tax payers. Participants expressed good correlation among measures which reveals that at least they consider information asymmetry as one of the causes of the customer dissatisfaction. These are the some observations about this study. The people who are trying hard to make education an industry should look in to the fact that our citizens are still not mature to exploit the rights of the customer. They need to be made aware and encourage practicing these to make this industry an efficient social transformation mechanism by the way of customer forced accountability.

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Suggestions for Further Study

Due to paucity of time and resources investigator could not study all of the aspects of the subject, thus suggests following threads to catch on by the coming up researchers.

- The study could be replicated for bigger sample and using more vigorous tools for ascertaining the half reached conclusions.
- A study regarding comparison of such measures in terms of teachers, students and parents and administrators will be interesting proposition.
- Experimental study can be conducted for effect of some training on students and parents as customer enforcing accountability in school system.
- Comparison of these measures in respect of different cultures, economic strata, systems of education and levels of education can be studied for fruitful research.

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