Price Fairness and Its Linear Dependence on Consumer Attitude:

A Comparative Study in Metro and Non Metro City

Utkal Khandelwal, (Corresponding Author)

IBM, GLA University, 17 Km. stone,NH#2 Mathura-Delhi Road, Chaumuha, Mathura-281406 (U.P). India Tel: +91-9568145600 Fax: +91-5662-241687, E-mail: utkal.khandelwal@gla.ac.in

Dr. Naval Bajpai

Indian Institute of Management, Raipur (Chattisgargh.) INDIA Tel: +91-9893257526, E-mail: navalbajpai@rediffmail.com

Abstract

The purpose of this paper is to find out the factors affecting price fairness through review of literature and then develop a simple and precise model of price fairness. Further, this paper measures the impact of price fairness on consumer attitude and comparative study of understanding the same in metro and non metro customers. Since, Metro and non-metro customers are different in their consumer behaviour in many ways. Linear regression and z-test was used to measure the impact of these attributes on consumer attitude and difference in metro and non-metro customers respectively.

Paper identifies nine different antecedents of price fairness through extensive review of literature and then develops a simple model to understand price fairness easily. Furthermore, the degree of price fairness in formation of positive consumer attitude is high in non metro as compare to the metro city. Regression result between consumer attitude and price fairness clearly explain that the higher level of understanding towards price fairness provide higher level of positive consumer attitude among customers of both the metro and non-metro city. Since consumer behaviour and their purchase intentions are influenced by their subjective perception of price fairness, marketers need to understand what constitutes a fair price.

The paper proposes a conceptual framework of factors affecting price fairness. Results, perception of price fairness is different in metro and non-metro consumers and it also affect the consumer attitude gives the unique understanding of price fairness in formation of marketing policies for these two different regions.

Keywords: Pricing, Consumer attitude, Fair dealing

1. INRODUCTION

Previous research on customer attitude has examined factors that enhance consumer attitude in various contexts (Dabholkar, 1994; Maria J. S. et al., 2003; Peter and Olson, 2008). As an important factor in the marketing mix, the role of product or service price fairness in the formation of positive consumer attitude has not been studied extensively in recent consumer attitude research. When price has been included, it has been one of numerous product attributes considered relevant (Voss et al., 1998); however, the exclusive influence of price fairness on consumer attitude judgments remains unclear. In this research we include consumers' price perceptions as an important factor influencing consumer attitude judgments. This influence is both direct, and indirect via price fairness perceptions.

Since price has various dimensions, so researchers gave its meaning and definition in numerous ways. In the narrowest sense price should be define as price is the amount of money charged for a product or service. Nagle and Holden (2002) believe that price merely represents the monetary value a buyer must give to the seller as a part of purchase agreement. Biren (1997) Price, from the perspective of the seller, is the sum of the costs incurred in design and production plus a reasonable mark-up margin or profit. There is some more comprehensive definition of price also. According to Shipley and Jobber (2001) Price is the measure by which industrial and commercial customers judge the value of an offering, and it strongly impacts brand selection among competing alternatives. As earlier mentioned that most important mix among all the marketing mix is pricing, since pricing is the only mix where all the efforts should be capitalized. Through pricing we can measure all the efforts as well. Nagle and Holden (2002) point out if effective product development, promotion and distribution sow the seeds of business success, effective pricing is the harvest.

Price fairness is defined as "a consumer's assessment and associated emotions of whether the difference between a seller's price and the price of a comparative other party is reasonable, acceptable, or justifiable" (Xia et al., 2004). As is dynamic pricing so popular in e-commerce market, so is the uproar of consumers' complaints because of their perceived price unfairness (Cox, 2001). Kahneman et al. (1986) explain price fairness as a psychological factor that critically affects consumers' reaction to price. Reinartz (2001) indicated that consumers' perceived price fairness is the most important condition that must be upheld for dynamic pricing to work. Concept of price fairness may lead to the customer satisfaction and dissatisfaction comes from price unfairness,

separation from exchange relationship, negative communication, or engaging in other actions that deteriorate the reputation or trust of sellers (Suter and Hardesty, 2005). So, it is clear from the above definitions that in order to get success in market, marketers have to focus towards price fairness. Today's customers have less time to spend in price comparison and this should be the reason that some marketers may go for price unfairness. Price unfairness is not at all the objective of long term market sustainability. As such, this study first try to find out the price fairness factors, its impact on consumer attitude and comparative study of understanding price fairness in metro and non metro customers. Metro and non-metro customers are different in their consumer behaviour in many ways this should be justify by various previous research. Joshi and Mishra (2011) find that awareness level of the respondents is higher in the metros as compared to the non-metros in India. Datt & Sundharam (1990) explain the similar phenomenon which justifying the results of this study. They explain, one of the serious problems facing India's economy is the sharp and growing regional Imbalances among India's metro and nonmetro regions in terms of per capita income, poverty, availability of infrastructure and socio-economic development. They further explain, the difference in growth rate between these two regions, as of 2010, New Delhi had a Per Capita Income of \$ 3,020 whereas Bihar's Per Capita Income was at a paltry \$ 445. So, for better understanding of price fairness it is necessary to find out the difference of price fairness understanding in metro and non-metro customers.

2. PREVIOUS RESEARCH

Price fairness is not a new concept in the study of consumer behaviour. A variety of marketing and psychology studies have been conducted to investigate consumers' response to price based on distributive justice theory (Thibaut and Walker, 1975), equity theory (Adams, 1965) and dual entitlement principle (Kahneman et al., 1986). These principles are the important factors of price fairness and hence taken as important variables in this study. One of the most persistent views regarding human behaviour is fairness underlying people's transactions. To the extent that fairness affects economic phenomena, Baumol (1982) suggests that the fairness criterion can be operationalized and applied to concrete problems in order to "derive results which are not all obvious in advance". In addition, research also has shown that equity is related to satisfaction. Equity is a concept closely related to fairness and usually defined as a fairness, rightness, or deservingness judgment that consumers make in reference to comparative others (Xia et al., 2004).

2.1. Price Fairness as an antecedent of Consumer Attitude

There is no doubt that price fairness leads to positive consumer attitude. Positive consumer attitude has been recognized as a component of Price fairness (Kahneman et al., 1986). More specifically Price fairness can be understood as a predictor of consumer attitude. Consumers are willing to pay a price premium in order to lower these risks and they tend to pay more to well-established brands. Lichtenstein et al. (1993) point out a different view about how pricing affects people's buying attitudes and they state that a higher price would negatively affect consumers' purchasing probabilities.

2.2. Price Fairness: An exploration through literature

It is very important to identify factors on which price fairness is dependent. Although a great deal has been written about price fairness, still there is no clear understanding on how the factors purported to be associated with it contribute to its development or how these marketing factors can be managed to promote the development of price fairness. There are various components of price fairness such as distributive fairness, consistent behaviour, personal respect and regard for the partner, fair dealing, price honesty and price reliability (Diller, 2008). Based on literature following are some of the factors on which price fairness is dependent.

Consumers are always keen to pay low price for a product. Price conscious is the extent to which customer want to pay low price. Low price always be attractive to the customer. There are a heavy bunch of customers who search for a low price product. Lichtenstein et al, (1993), defined 'price consciousnesses as "the degree to which the consumer focuses exclusively on paying a low price" whereas they defined 'value consciousness' a "reflecting a concern for price relative to quality received". Alford and Biswas, (2002), believe that "the price conscious consumers are more concerned about searching for low price, and they derive emotional value and entertainment from shopping for low prices"

Price Conscious is totally depending on the value perception of the customer. Customer calculated the satisfaction which they get at the time or after the consumption of the particular product according to their perceptual ability. Zeithami (1998) define perceived value as "the consumer's overall assessment of utility of product or service based on the perceptions of what is perceived and what is given".

The concept of distribution fairness concerns the returns or the relative allocation of a distribution of resources or premiums already on hand. Kahneman et al. (1986) explore that people measure their sense of fairness against a comparable referential situation, let's say the status quo, to which the participants are bound. It is just against the principle of passing the burden of inflation wholly to the customer for profit protection. Diller (2008) explains

this phenomenon the fact that the price and the service/product stand in a standard market-acceptable relation to one another. Fairness in distribution achieves when both the parties are enjoying win-win situation. "The cardinal rule of fair behaviour is surely that one person should not achieve a gain by simply imposing an equivalent loss on another" (Kahneman et al., 1986).

Perception is the process by which people select, organize, and interpret information to form a meaningful picture of the world. Although Nagle and Holden (2002) believe that price merely represents the monetary value a buyer must give to a seller as part of a purchase agreement, we go on suggesting that customer's price perception is closely related on her perception of quality, value and other beliefs. Along with consumer attitudes and shopping orientation, there has been significant weight given to price perceptions of consumers, and its impact on the adoption of product and service innovations.

Diller (2008) explains consistent behaviour as a major component of price fairness. Consistency implies to follow "conformities to rule" always in interaction procedures between the marketer and customers. In simple words, consistent behaviour can be explained as all the parties are keeping the same pricing formulas. It is assumed that the business partners will observe and hold to specific, written or unwritten standards and rules. If one partner wants to change these rules, he/she must announce his/her intention and the details of it to the other partner openly and persuasively beforehand.

Pricing honesty is a characteristic that is tuned particularly to the truth and clarity of the pricing information (Diller, 1997). Price honest is the condition in which customer relies on marketer that he/she will not try to take advantage of him/her. In this situation, customer wants accurate, easily understandable, pure and complete information concerning prices, conditions and services.

Diller, (1997) coined price reliability as a component of price fairness. He explained the price reliability as the observance of the prices that were established at the time the contract was signed. It can become a problem, however, especially when unforeseen service conditions turn up during the performance of the same.

The internal structure of price knowledge refers to the question of whether and how the accuracy and size of, and confidence in one's price knowledge causally impact one another. Park et al. (1994) have pointed out that objective knowledge tests require respondents to access information that is stored in memory, while judgments of self-assessed knowledge require no such access. Furthermore, they found that subjective knowledge assessment is based more on product-related experiences such as information search, product usage, or ownership, than on the memory for product-class information that governs objective knowledge.

The concept of fair dealing specifies liberality in the case of doubt and flexibility in the face of unpredicted circumstances. Diller (1997) identified fair dealing as a component of price fairness and explains this term as generosity in the situation of doubt and rigidity when the situations are unexpected. Generosity is revealed in a readiness to meet the partner halfway and in the rejection of a petty interpretation of contracts or agreements. Flexibility in the interpretation of the business relation is the basic requirement in fair dealing.

Leventhal (1980) states that, people are more inclined to accept compromises, decisions and the consequences of such decisions if they have had a voice in the determination of same. The possibility of applying an influence and the right of codetermination in the determining of the business relation promote acceptance, especially in asymmetrical relations. Diller (1997) explained this as a corporate target pricing. He explained this component of price fairness also impacts the concept of just procedure, which can play a particularly important role in individual price negotiations. If prices are forced upon a partner without his or her ability to present counterarguments, such procedure is considered unfair.

On the basis of the list of antecedents of price fairness, following model is used to measure the difference of consumer attitude in metro and non-metro city taken for present study.



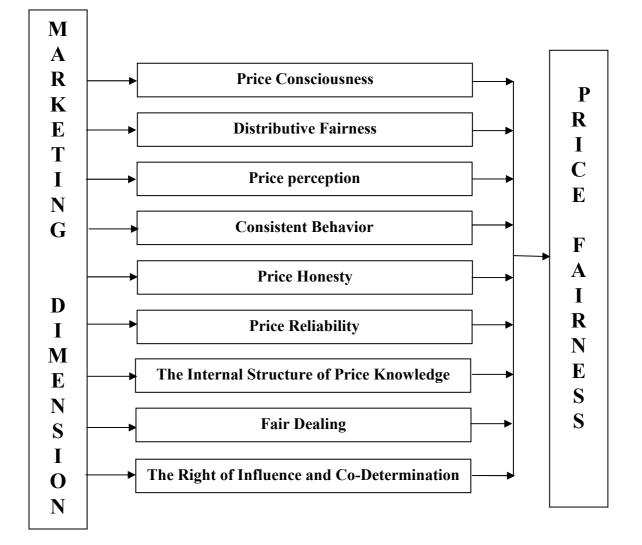


Figure-1: Proposed model of consumer attitude to test the difference between metro and non-metro city

3. RESEARCH METHODOLOGY

Present study is conducted using a theoretical model to measure price fairness. Methodology can be broadly explained by understanding theoretical model, framing hypotheses; sample and sample profile; tool and design of the study. A detailed description of all these are as follows:

3.1. Theoretical model of Price fairness

For conducting any research it is very important to conceptualize the thought. For the present study, a model of price fairness is developed. On the basis of extensive literature survey researchers have identified 9 variables which are having straight impact on price fairness. Literature clearly reveals that these 9 variables are antecedents of price fairness. Figure-1 exhibits this proposed model of measuring Price fairness. For measuring the price fairness difference between metro and non-metro city, z-test is applied.

3.2. Research Question and Hypotheses

In the light of existing literature, the following research questions are framed:

1. There exists a different degree of understanding towards price fairness in metro and non-metro city.

2. Price fairness enhances the consumer attitude level in both in metro and non-metro city.

Difference in price fairness is measured through measuring the summated difference in metro and non-metro city. For measuring the statistical significant difference, main hypothesis is constructed. In addition to this, one hypothesis is constructed to measure the linear impact of price fairness on consumer attitude level of metro consumers. Similarly, one hypothesis is also constructed to measure the linear impact of price fairness are as follows:

H1: There is a significant difference in the degree of price fairness in metro and non-metro city.

- H₂: Price fairness has significant linear impact on consumer attitude of metro city.
- H₃: Price fairness has significant linear impact on consumer attitude of non-metro city.

3.3 Sample and sample profile

Subject of the present study are the consumer visited to various shops and malls in metro and non metro city. Sample drawn for metro city constitutes the consumers of National capital region of India i.e. New Delhi and sample drawn for non-metro city non-metro city constitutes the consumers of Gwalior and Mathura region of India. For sampling, Convenient (Non Probability) sampling technique is used. Individual respondent was the sampling element.

3.4 Sample Profile

Subjects of the present study are selected from the various stores and malls of metro and non-metro city. Total 250 subjects are randomly selected from each metro and non-metro city and will be given same questionnaire, in which, respondents indicated their opinion about marketing dimension in both the city (i.e. metro and non-metro city).

3.5. Tool

It has already been discussed that the present study is focused on the measurement of degree of difference in price fairness of a metro and non-metro consumers. Price fairness is measured through nine independent variables. These nine variables are collected through literature. Each variable is measured using a five point rating scale ranging from 'strongly disagree' to 'strongly agree' with 'neither agree nor disagree' as the middle point. Internal consistency of the scale is checked and Cronbach's alpha is found to be 0.87. Based on the literature, each question in the questionnaire is constructed (see Appendix).

For checking validity of the scale we applied content validity technique. We systematically evaluated how well the content of a scale represents the measurement test at hand. Due to the subjective nature of this technique we also used a more sophisticated technique referred to as criterion validity.

3.6. Design

For measuring the difference between means of metro and non-metro consumers, z-test for two populations is employed. In addition, for measuring the linear impact of price fairness on consumer attitude in metro and non-metro city, simple regression technique is employed.

4. DATA ANALYSIS and INTERPRETATION

Data analysis is done using MS Excel software. Analysis is done using three steps: z-test for comparing means; regression for measuring linear impact of price fairness on consumer attitude in metro and non-metro city. Z-test result and regression results are presented from table-1 to table-3. Following section focuses on these 3 tables and their statistical interpretation:

	Price Fairness (Metro city)	Price Fairness (Non-metro city)
Mean	29.968	31.128
Known Variance	4.055197	2.593992
Observations	250	250
Hypothesized Mean Difference	0	
Ζ	-7.112850075	
$P(Z \le z)$ two-tail	1.13665E-12	
z Critical two-tail	1.959963985	

Table 1: z-test for comparing two means (Price Fairness) in Metro and Non-metro city

For finding out the significant difference in means of metro and non-metro city in terms of price fairness on consumer attitude z-test is applied. Computed z value is coming as -7.11 which falls in the rejection region (at 5% level of significance). This indicates rejection of null hypothesis and acceptance of alternative hypothesis. Hence, null hypothesis of no difference is rejected and alternative hypothesis of significant difference is accepted. Hence, it can be concluded that there is a significant difference between understanding price fairness (at 95% confidence level) between metro and non-metro city. Sample result clearly exhibit that mean of metro city is lower than non-metro city are clearly lower (mean=29.96) than non-metro city (mean=31.13).

 Table 2: Regression Results between Consumer Attitude (Metro city) and Price Fairness (Metro city)

Regression Statistics				
Multiple R	0.990803255			
R Square	0.981691091			
Adjusted R Square	0.981617264			
Standard Error	0.27303042			
Observations	250			

 Table 2 (a): Regression Statistics for Consumer Attitude and Price Fairness in Metro city

 Table 2 (b): ANOVA table for Consumer Attitude and Price Fairness in Metro city

	Df	SS	MS	F	Significance F
Regression	1	991.2566886	991.2566886	13297.31803	1.8985E-217
Residual	248	18.48731137	0.07454561		
Total	249	1009.744			

Table 2 (c): t - value and p - value for the regression result between Consumer Attitude and Price Fairness in Metro city

	Coefficients	Standard Error	t Stat	P-value
Intercept	0.667749615	0.2546771	2.62194605	0.00928371
Price Fairness	9.778484309	0.084798763	115.3139975	1.8985E-217

Table 2 (a) exhibits regression statistics for Consumer Attitude and Price Fairness in Metro city. R^2 value is coming as 98.2% which is an indication of strong predictor model. Standard error is relatively low. Table 2 (b) shows that F-value is significant which exhibits overall significance of regression model. Table 2 (c) exhibits t - value and p - value for testing the slope of the regression model. Significant p - value corresponding to t - value is an indication of linear relationship between dependent (consumer attitude) and independent variable (price fairness) in metro city.

Table 3: Regression Results between Consumer Attitude (Non-metro city) and Price Fairness (Non-metro city)**Table 3 (a):** Regression Statistics for Consumer Attitude and Price Fairness in Non-metro city

Regression Statistics				
Multiple R	0.963974024			
R Square	0.92924592			
Adjusted R Square	0.928960621			
Standard Error	0.429273314			
Observations	250			

 Table 3 (b): ANOVA table for Consumer Attitude and Price Fairness in Non-metro city

	df	SS	MS	F	Significance F
Regression	1	600.2036566	600.2036566	3257.098212	1.2282E-144
Residual	248	45.70034341	0.184275578		
Total	249	645.904			

Table 3 (c): t - value and p - value for the regression result between Consumer Attitude and Price Fairness in Non-metro city

	Coefficients	Standard Error	t Stat	P-value
Intercept	1.537715233	0.519192381	2.961744603	0.003356008
Price Fairness	9.491366682	0.16630807	57.07099274	1.2282E-144

Table 3 (a) exhibits regression statistics for Consumer Attitude and Price Fairness in Non-metro city. \mathbb{R}^2 value is coming as 92.9% which is an indication of strong predictor model. Standard error is relatively low. Table 3 (b) shows that F-value is significant which exhibits overall significance of regression model. Table 3 (c) exhibits t - value and p - value for testing the slope of the regression model. Significant p - value corresponding to t - value is an indication of linear relationship between dependent (consumer attitude) and independent variable (price fairness) in non-metro city.

5. DISCUSSIONS

Table 1 reveals that the degree of price fairness in formation of positive attitude is high in non metro as compare to the metro city. It seems that due to factors like price consciousness and price perception exhibits higher level of positive consumer attitude in non-metro cities. The reason can be explained as the customers in non-metro city have less disposing income and need more value for money. In addition, non-metro customers spend more time in shopping. This reason was also explained by Ploeg (2009). He explained that average time spent on grocery purchasing in non-metro regions are more as compare to the metro regions because of the distance of market from these regions. Customers living near to the market spent less time in shopping and the customers living away from the market spent more time. Another reason, customers are searching low-price product in metro as compare to the metro customers'. For that they are spending more time. This practice is less in metro customers. This should be explained by Alford and Biswas, (2002), as the price conscious consumers are more concerned about searching for low price, and they derive emotional value and entertainment from shopping for low prices. So, the people living in non-metro city are enjoying in purchasing low price product and also spend more time for the same as comparing with the people living in metro cities. For taking marketing competitive advantage in understand consumer attitude with respect to price fairness, marketers have to focus towards the variables such as price consciousness, product quality, price perception, demand, price fairness, competitive strategy, internal structure of price knowledge and price honesty.

Table 2(a), 2(b), 2(c) and 3(a), 3(b), 3(c) exhibit the result of regression (linear) between consumer attitude and price fairness for metro and non-metro city respectively. Both the regression results establish a significant positive linear relationship between consumer attitude and price fairness in both metro and non-metro region. Price fairness is undoubtedly affecting consumer attitude. Price fairness comes as an important variable in affecting consumer attitude. Higher degree of price fairness will definitely generate higher level of positive consumer attitude. For generating positive consumer attitude marketers have to understand the utility of fair pricing phenomenon.

REFERENCES

- Adams, J.S. (1965). Inequity in social exchange, in Berkowitz, L. (Ed.). Advances in Experimental Social Psychology, Vol. 2, Academic Press, New York, NY, 267-299.
- Alford, B.L. and Biswas, A. (2002). The effects of discount level, price consciousness and sales proneness on consumer's price perception and behavioural intentions. Journal of Business research, 55(9), 775-83.

Baumol, W.J. (1982). Applied fairness theory and rationing policy. American Economic Review, 72, 639-651.

- Biren Prasad (1997). Analysis of pricing strategies for new product introduction. Pricing strategies and practice, 5(4), 132-141.
- Cox, J.L. (2001). Can differential prices be fair? Journal of Product & Brand Management, 10(5), 264-275.
- Dabholkar, P. (1994). Incorporating choice into an attitudinal framework: analyzing models of mental comparison processes. Journal of Consumer Research, 21(1), 100-118.

Datt, Ruddar. and Sundharam, K. P. M. (1990). The Indian Economy. New Delhi: S. Chand and Company Ltd.

Diller, H. (2008). Price fairness. Journal of Product & Brand Management, 17(5), 353-355.

- Joshi, N. and Mishra, D.P. (2011). Environment Friendly Car: A study of Consumer Awareness with special reference to Maharashtra State, Information Management and Business Review, 2(2), 92-98.
- Kahneman, D., Knetsch, J.L. and Thaler, R.H. (1986), "Fairness and the assumptions of economics", Journal of Business, Vol. 59 No. 4, pp. 285-300.
- Leventhal, G.S., Karuza, J. and Fry, W.R. (1980). Beyond Fairness: A Theory of Allocation Preferences, New York: Springer-Verlag.
- Lichtenstein DR, Ridgway NM, Netmeyer RG. (1993). Price Perceptions and consumer shopping behavior: a field study. Journal of Marketing Research, 30(May), 234-245.
- Maria J. S, Ana Belen Del Rio, Victor Iglesias and Rodalfo Vazquez (2003). Attitude and satisfaction in a traditional food product. British Food Journal, 105(11), 771-790.
- Nagle, T.T. and Holden, R.K. (2002). The Strategy and Tactics of Pricing: A Guide to Profitable Decision Making. New Delhi: Prentice-Hall.
- Park, C.W., Motherbaugh, D.L. and Feick, L. (1994). Consumer knowledge assessment. Journal of Consumer Research, 21(1), 71-82.

- Peter, J. P. and Olson, J. C. (2008). Consumer Behavior and Marketing Strategy. 8th International edition, New York: MacGraw Hill Companies Inc.
- Ploeg, M. V. (2009). Access to Affordable and Nutritious Food: Measuring and Understanding Food Deserts and Consequences. Diane Publishing Books.

Reinartz, W.J. (2001). Customising prices in online markets. European Business Forum, 6, 35-41.

- Shipley, D.D. and Jobber, D. (2001). Integrative pricing via the pricing wheel. Industrial Marketing Management, 30(3), 301-314.
- Suter, T.A. and Hardesty, D.M. (2005). Maximizing earnings and price fairness perceptions in online consumerto-consumer auctions. Journal of Retailing, 81(4), 307-317.
- Thibaut, J. and Walker, L. (1975). Procedural Justice: A Psychological Analysis, Lawrence-Earlbaum Associates, Hillsdale, NJ.
- Voss, G.B., Parasuraman, A. and Grewal, D. (1998), "The role of price, performance and expectations in determining satisfaction in service exchanges", Journal of Marketing, Vol. 62, October, pp. 46-61.
- Xia, L., Monroe, K.B. and Cox, J.L. (2004). The price is unfair! a conceptual framework of price fairness perceptions. Journal of Marketing, 68(4), 1-15.
- Zeithami, V.A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. Journal of Marketing, 52(3), 2-22.

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage: <u>http://www.iiste.org</u>

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <u>http://www.iiste.org/Journals/</u>

The IISTE editorial team promises to the review and publish all the qualified submissions in a fast manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

