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# **International Journal in Physical and Applied Sciences**

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# Environmental Perceptions of Teenagers: The Effects of Family Income and Parents' Education

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## **ABSTRACT**

Evaluation of public environmental perception provides authentic data for decision makers to manage the protection of natural resources. Comprehensive understanding of the environment is always affected by socio-economic factors such as economy and education. In order to measure the effectiveness of these variables, three environmental education components, awareness, knowledge and attitude, were measured against the economic parameter of household income among selected secondary school students (n=470) in Malaysia. A comprehensive questionnaire (73 questions) was employed to investigate the effects of family income on the understanding of the students on various environmental topics. The collected data were analyzed by comparing variances and means in SPSS software (ver. 19). The results demonstrate a significant difference ( $P < 0.05$ ) in the level of respondents' knowledge about the environment while the attitude and awareness remain the same. Students who come from families around the national poverty line demonstrate less environmental knowledge than students from wealthy families. The level of formal education among their parents demonstrates statistical correlation with the levels of environmental awareness, knowledge and attitude, suggesting the effect of family influences. The study concluded that a public source of education such as the mass media with a high level of environmental attitude and awareness was dominant among all income groups regardless of the family income and/or parents' educational background. The study demonstrates the effectiveness of education, wealth and media in order to increase the environmental perception in Malaysia. However, educational level seems to be more effective than wealth since higher income nations cause more environmental problems due to excessive consumption of resources. The above mentioned factors may contribute significantly to public environmental awareness if further investigations are conducted to uncover effective points in school syllabuses.

**Keywords:** Environmental Knowledge, Attitude, Awareness, Teenager; household Income; Formal Education; Malaysia

## **1.INTRODUCTION**

In recent decades, environmental problems have appeared as complicated issues around the world **Brown**(1990). The complexity of environmental issues involves a variety of knowledge and disciplines to achieve possible solutions. The prohibiting approaches of the past decades have turned into modern interactive collaboration between authorities and the public, based on environmental understanding.

The planned behavior as the result of human intention is in direct and indirect relation with 3 components of attitude, subjective norms and perceived behavioral control where attitude is the person's favorable or unfavorable feeling in performance of a behavior. Furthermore, subjective norm refers to the individual's perceptions of social pressure in performing or not performing of a given behavior where determined by normative beliefs with individual social pressure assessment on a particular behavior Ajzen(1991). In order to achieve an authentic and positive organizational behavior towards environmental protection, the basic measures should be taken into account Luthans(2002). Studying environmental measures including attitude, awareness and knowledge provides basic and insight views on how effective the public would protect the environment Palmer (1998). Moreover, awareness is given as a general concern over the environmental issues happening around us. Evaluating people's environmental education levels provides information on how government and the public can work in order to address challenges and suggest solutions UNESCO(1980). Environmental education has rapidly influenced environmentalists, governments, educators, public and NGOs since the Tbilisi summit that emphasized principals of environmental literacy and education Tbilisi(1977). The term "Environmental Literacy" is defined by Rockcastle(1989) as the following:

"Environmental literacy is an understanding at some basic level of the interaction of humans and their natural environment with regard to both living things and non-living things (air, water, soil and rocks). The interaction implies taking from as well as putting into (the environment)".

A decade earlier, the state of emergency was announced by Guyer & Peters (1987) to educate a generation of "quality environmentalists" who care about the future of our planet. This topic became highly attractive among groups of people who appear to be current or future decision makers of the society Roth(1992). This is why environmental education as an important factor for protection of nature is believed to be more effective when children are exposed in their earlier age of schooling to the environment Shim(2008). However, in many countries environmental education is not included in the school curriculum Nadson & Shidawati(2005); Said(2003). The public obtains environmental knowledge from other independent sources Chukwuma(1998); Ramsey & Rickson(1976). The Public with an understanding of environmental issues supports local and national activities such as recycling of waste materials Huang et al.(2006).

The environment is under increasing pressure from socio-economic factors Mink(1993); Bekalo & Bangey(2002); Bolton(1998). People with higher income may care less about their surroundings. Likewise poor people do not know how to protect the environment effectively Digby(2010); O'Brien(2007). This statement is in agreement with studies on poverty and the environment Swinton et al.(2003). Poverty appears from a borderline of income known as the "poverty line". Watts (1964) defines the term as follows:

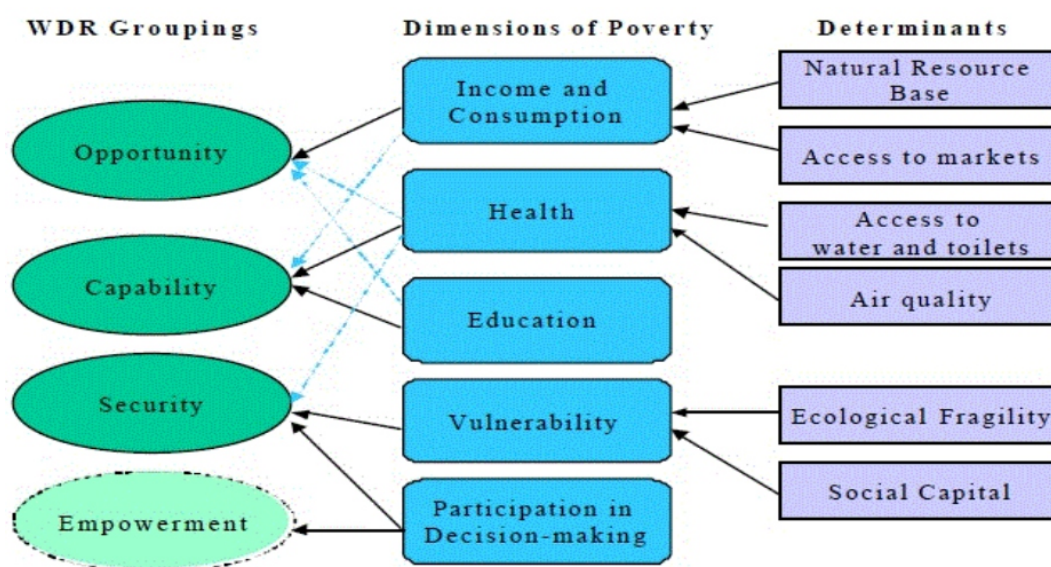
"In the simple terms, the poverty lines represent the level of income that divides the families of a particular size, place, and time into the poor and the non-poor. Hence the set of poverty lines are intended to designate equivalent levels of deprivation. Similar thresholds could be obtained for the more comprehensive constraint measures presented above, and these, again, could be used to divide the population into poor and non-poor"

### **1.1 Poverty and the Environment**

The relationship between poverty and the environment remains blurred where various socioeconomic

factors interfere and effect trends against variables Bucknall et al.(2000). While environment itself shows an indirect effect on the educational aspects, education provides opportunity for a better contribution to the environment based on proper literacy and adequate funding Van Liere& Dunlap(1980). A proper education that serves for sustainability takes the advantage of educational opportunities from both formal and informal education Pacheco et al.(2006). It makes the trainee capable of getting involved in decision making process. This is where a less trained individual may contribute less in future. Figure 1 explains the effect of environmental determinants on the dimensions of poverty and subsequent future opportunities. While black arrows show the main result of the poverty dimension, the blue dotted arrows indicate possible scenarios that result from groupings.

Figure 1 diagram education-poverty-environment (After Bucknall et al, 2000)



As Bucknall et al. (2000) has stated that poverty is in a very complex and sophisticated relationship with the environment. Poverty can cause several social and health problems. It can be a consequence of the poor quality of the environment. This one-way relationship possibly affects the security of humans as well as their living circumstances Rovira(2000). As mentioned earlier, lack of proper education limits the access to future opportunities and capabilities. Moreover, security in various aspects is threatened by vulnerability of a fragile nature. The ecosystems are determinants in this relationship where lack of adequate function affects dimensions of the poverty that result in undesired consequences Swinton et al.(2003); Sachs(1994); Jazzairy et al. (1992). To overcome the problem society needs to produce a quality generation concerned about environmental issues Peters(1981). Although Bucknall et al. (2000) shows a one-way relationship from nature to humans in society, other scientists believe that a quality environment is highly dependent on public awareness, knowledge and attitude Mansaray&Abijoye(1998); Schultiz&Oskamp(1996); De La Vega(2006). Several scientists believed that environmental awareness has strong correlation with key factors of environmental management Samalisto&Broson(2008); Hausbeck et al.(1992).

Knowledge is an important key component in studies that address environmental problems Madsen(1996); Mancl(2003). It is emphasized that providing knowledge at the early stage of children's life has greater influence on their environmental perceptions Shim(2008); Lukman et al. (2011). Furthermore, knowledge and other components are not effective unless the absorbed idea appears as a

a part of behavioral performances in the society Salequzzman&Rickson(1976); Bradley et al. (1999) and Fien(1997). However, it was highlighted by scientists that there are always gaps between the actual and the desired behaviors Zsoka(2008).

## **1.2 Environmental Education and Socioeconomic Aspects**

There are various factors that, beside environmental education, affect the results such as the socioeconomic status of the students. The main factor appeared on continual basis in environmental education. Short courses would not provide adequate and significant results Perron et al.(2006). Moreover, the curriculum is suggested to be efficient, proper and concrete enough to attract trainees' mind Eagan & Streckewald(1997). Villacorta et al. (2003) believe that three factors affect successful education namely parents, community and the trainees themselves. Parents are important since their encouragement influences the students, ethically, financially and morally. This is emphasized by Yousef (1998) where family income and levels of education of parents appeared to affect the pupil's perception of the environment. Furthermore, the level of parents' formal education is important for their own understanding of their daily socioeconomic progress Liu et al.(2009). Other scientists believe that financial aid accelerates the concept of education if enough time is provided for both trainees and trainers Perron et al.(2006). However, this does not guarantee protection of the environment where wealthier people may consume more and negatively affect the environment. Moreover, other scientists suggest that factors such as media are effective tools for development of environmental literacy among the students Coyle (2005); Arduni(2000); Strong(1998); Chan(1998). Environmental educational components are believed to be under the severe influence of public media and entertainment Karimi(2006); Yun(2002); Chung & Poon(2003); Sehat(2000).

Malaysia is considered a nation with an upper-middle class income, backed by accredited economic infrastructure where poverty has been significantly reduced in recent years Asian Development Bank(2011). It shows an adult literacy rate of 92.1 per cent (2008) while 3.8 per cent of the nation lives below the poverty line. This per cent is less than 2 where household income is below US\$ 1.25 a day (US\$ 1= RM 3). The national definition of poverty line includes income of less than RM 900 (US\$ 300) a month for a Malaysian family, while the unemployment rate remains below 3 per cent of the population Malaysian Department of Census(2010).

Several studies on environmental education have been conducted in Malaysia since the beginning of the 21st century to evaluate the public environmental awareness. There have been limited studies that focus on evaluating the public environmental awareness in various socioeconomic conditions. Furthermore, there are gaps in the researches on highlight that how these socio-economic conditions of families may possibly affect students. This study elaborates the role of family economic condition on the levels of environmental literacy of 16 years old students who are in "Form Four" by applying a questionnaire as survey instrument. This group of students has great motivation to become potential teachers for younger children of the community, to inculcate them with beliefs and understanding about environment Madruga et al.(2003). The research focuses in detail on the levels of environmental awareness, knowledge and attitude of the students who come from various economic and educational backgrounds. Economic background is defined as their parents' total monthly income that supports the families their children's education. The research is expected to answer questions including 1) how much do they know about the environment topics? 2) Does the formal educational level of parents affect the students' environmental education? 3) Is there significant difference an environmental awareness among students who come from different family economic and educational backgrounds?



In this research, the study team investigates the environmental perception in general and in particular, regardless of their knowledge over other school subjects. We expect to uncover the answers to the above questions to realize whether family income and parents' level of formal education affect teenage students' level of environmental awareness and commitment to the environment.

## **2. Materials and Methods**

### **2.1 Study Location**

Kajang town is located in the eastern part of Selangor State in Malaysia. The town is the capital of Hulu Langat district. The population has rapidly increased in recent years with annual growth of 9 percent. The city is known for industries with a variety of ethnic groups in the labour force coming from all over the country and overseas City Council of Kajang (2011). Moreover, Kajang has other activities such as agriculture, businesses and education. The National University of Malaysia (UKM) is located close to the downtown. The municipalities accommodate thousands of academicians and students. In fact, the city represents a small scale Malaysia. Kajang has 14 public secondary schools that accommodate students from year 7 to year 11 meaning age groups from 12 to 16.

### **2.2 Participants**

The study has focused on the students of 9 secondary schools at the age of 16 who attend "Form Four" classes in Kajang Town, Selangor, Malaysia. After this stage, elite students have the chance to enroll in university for a 1-year matriculation program. Other students, may go to "Form Six" and later on for university and college enrollment, or approach labor markets. The program, "Form Four", is close to the final destination of secondary school students who gain knowledge from formal educational curriculums.

### **2.3 Sampling**

A total of 9 (out of 14) schools agreed to collaborate in this research in Kajang Town, Selangor, Malaysia. The study needed a minimum number of respondents, ( $n=300$ ). A total of 600 questionnaires were distributed among the students. The respondents' return rate was calculated as 78.33 percent, where 470 questionnaires were received from the students. The selection of the sample size followed the method was mentioned earlier by scientists Salant & Dillman (1994); Krejcie & Morgan (1970); Cochran's Formula (1977).

### **2.4 Instrument**

The research carried out using a questionnaire as data collection instrument. It included 48 closed-ended questions covering various aspects of the current environmental issues at global and local level. It is believed that closed-ended questions probably limit the responses to the topics Fraenkel & Wallen (1996). The instrument has a set of questions to fulfill the local authority concerns over environmental problems. The questionnaire consisted of 3 sections:

"Awareness", "Attitude" and "Knowledge". The "Awareness" section includes 20 questions that measure perception, influence and concern for the environment. The "Attitude" section has 19 questions to evaluate respondents and classify them from pro-environmentalist to anthropocentric points of view and their social responsibilities towards the environment. The scale of awareness and attitude questions consist of 4 options to evaluate the respondents. Since there is no neutral response, respondents were invited to provide their desirability on each point. This method was reported earlier by Garland (1991)

among others. The “Knowledge” section includes 9 questions that directly measured the respondents’ knowledge of the environment.

## **2.5 Reliability and Validity of the Instrument**

Reliability and Validity are two necessary factors which must be considered in preparing, establishing and in using instrument.

### **2.5.1 Reliability**

The reliability of questionnaire was tested in a pilot group including 34 students (more than 10 percent). The SPSS (ver. 19.0) was used to assess the reliability of the questionnaire. Cronbach’s alpha standardized reliability coefficient for awareness, knowledge and attitude were included 0.865, 0.731 and 0.837 respectively. Based on Spearman Brown Prophecy formula, those three items (awareness, knowledge and attitude) were assessed.

### **2.5.2 Validity**

The content and face validity were implemented for the instrument by expert evaluation. The evaluation was conducted before implementation of the study in order to test the questionnaire that covers contents that match all relevant matters in its academic discipline. Moreover, the validity of the instrument was evaluated by translation from its original language (English) to Bahasa Malaysia (Malaysian Language) and back to English to check its accuracy. The translation processes were done by English-Malay and Malay-English accredited bilingual translators.

## **2.6 Scoring/Coding of Responses**

The instrument consisted of 3 parts of “awareness”, “attitude” and “knowledge”. The first part included 20 questions that address 3 sub topics of awareness including influence, perception and concern. The first section of awareness included 5 questions (1-5) that measure “influence” where scored by “1=Never”, “2=Seldom”, “3=Often” and “4=Very often”. The questions from 6 to 14 measure the second part of awareness called “perception” where scored “1=Much Worse”, “2=Worse”, “3=Better” and “4=Much better”. The last 6 questions of awareness evaluate “concern” on environmental issues (questions 15-20) scored by “1=Not concerned at all”, “2=Somewhat concerned”, “3=Concerned” and “4=Very concerned”. The next part of questionnaire that included 19 questions focused on “attitude” where employed Likert scale of four rates of “1=Strongly Disagree”, “2=Disagree”, “3=Agree” and “4=Strongly Agree”. The last batch of questions (9 questions) targeted the item of “knowledge” that scored by “True/False” choices. Answers to the knowledge questions were evaluated based on correctness of each choice where either true or false choices may possibly be correct or incorrect. The correct answer was valued as “4” while incorrect answer scored “1”.

## **2.7 Statistical Analysis**

The Statistical Package for the Social Sciences (SPSS version 19.0) was the computer software used to analyse the collected data. The statistical analysis of One-Way ANOVA was applied in this study. One Way ANOVA was applied to compare the mean scores of study groups to analysis the variance. Since the comparison was conducted between more than 2 groups methods such as t-test was not applicable. The levels of awareness, attitude and knowledge were described using a descriptive statistical approach. Variance analysis was employed to measure the mean scores among groups to present participants’ differences on environmental topics. The income groups as an independent variable in this study were evaluated by One Way ANOVA where applied to compare differences between group means. A post-hoc

test was conducted where variables showed statistically significant differences ( $P < 0.05$ ). An analysis of test variance identified differences among the independent variable of household income and the score level of awareness, knowledge, and attitude among groups.

### 3. Results

Descriptive statistical analysis was used to show the mean difference in students' environmental awareness, knowledge and attitude (AKA) between different categories of "Income". The results of descriptive frequency analysis of data from each question are reported in annex I (a, b and c). Moreover, a parametric statistical analysis was made to compare the differences of environmental AKA between respondents.

#### 3.1 Awareness

A total number of 419 students replied to the awareness questions. The details of descriptive analysis are shown in Table 1. The results show similarities of means among the various income groups. It moves slightly from a minimum value of 2.35 ( $\pm$ SD 0.394) for students who come from families with an income of more than RM60,000 to the maximum common value of 2.43 ( $\pm$ SD 0.293 to 0.337) for income groups above RM15,000. Interestingly, students from families who earn below RM15,000 are placed in between the first two categories.

Table 1 Descriptive Analysis of Students' Awareness in Various Income Groups

Family Income (KRM/pa*)	N	Mean	Std. Deviation
<15	93	2.41	0.315
15-30	115	2.43	0.337
30-45	98	2.43	0.293
45-60	54	2.43	0.302
>60	59	2.35	0.394

\*Ringgit Malaysia thousands per annum

The One Way ANOVA test was employed to observe the significant differences of students' awareness among various income groups. The results are shown in Table 2. The results show no significant differences among income groups [ $F(4, 414) = .707, p = 0.588$ ]. This value indicates that the income of parents has no significant effect on students' environmental awareness in this study.

Table 2 One Way ANOVA Statistical Results between Income Groups on Awareness among Students

Awareness	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.302	4	0.075	0.707	0.588
Within Groups	44.185	414	0.107		
Total	44.487	418			

#### 3.2 Knowledge

The completed questions were received from 466 respondents (out of 470). The results are shown in Table 3. The mean values for families with lower income showed a lower level (3.07 for RM<15k, and 3.05 for RM 15-30k) and higher in families with income equal to and higher than RM 30k. Considering

the standard deviation ( $\pm$ SD) as a statistical tool to test the homogeneity of responses to certain questions indicates a wider range of difference among students who come from rich families ( $\pm$ SD=0.480 for RM>60k and  $\pm$ SD=0.514 for RM 45-60k) than the lower income group ( $\pm$ SD=0.448; RM<15k). The group which represents more than 23% of respondents (RM 30-45k) shows a reliable degree of similarity with standard deviation lower than other groups ( $\pm$ SD=0.412).

Table 3 Descriptive Analysis of Students' Knowledge in Various Income Groups

Family Income (KRM/pa*)	N	Mean	Std. Deviation
<15	102	1.69	0.154
15-30	129	1.68	0.164
30-45	105	1.75	0.139
45-60	54	1.71	0.163
>60	64	1.75	0.189

Ringgit Malaysia thousands per annum

There was statistically significant difference between income groups when knowledge was investigated [F (4, 461)=2.880, p = 0.022] (Table 4). A supplementary post hoc analysis was employed to identify the difference among groups. The results showed that there were significant differences between students whose parents earn from RM15 to 30k when compared to other groups of RM30-45k (Table 5). This shows that their parents' income affects the students' knowledge.

Table 4 One Way ANOVA Statistic between Income groups on Knowledge among Students

Knowledge	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.367	4	.092	3.589	0.007
Within Groups	11.482	449	.026		
Total	11.849	453			

Table 5 Post Hoc Multiple Comparisons result for Knowledge regarding to Income among students

(I) Socio-economic	(J) Socio-economic	Mean Difference (I-J)	Std. Error	Sig.
Between RM15,000 and RM29,999 per year	Between RM30,000 and RM44,999 per year	.061 <sup>*</sup>	.021	.030

### 3.3 Attitude

A total of 422 students (out of 470) responded to the questions. The statistical analysis of One Way ANOVA was applied to compare means of different income groups where attitude about environmental topics was concerned. The result of the descriptive analysis is shown in Table 6.

The presented means of income groups show a higher value compared to other environmental education factors (awareness and knowledge), fluctuating from 2.79 (RM15-30k income; SD=0.301) to 2.89



(>Rm60k income; SD=0.291).

Table 6 Descriptive Analysis of Students' Attitude in Various Income Groups

Family Income (KRM/pa*)	N	Mean	Std. Deviation
<15	93	2.85	.297
15-30	116	2.79	.301
30-45	104	2.86	.244
45-60	52	2.81	.242
>60	57	2.89	.291

\*Ringgit Malaysia  
thousands per annum

Malaysia  
thousands

The outcome of statistical analysis using One Way ANOVA (Table 7) illustrated that there was no statistically significant difference between income categories when attitude is considered [ $F(4, 417) = 1.477, p = 0.208$ ]. The result shows that income of parents has no effect on students' attitude since they presented almost the same environmental attitude.

Table 7 One Way ANOVA Statistic between Income groups on Attitude among Students

Attitude	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.460	4	.115	1.477	.208
Within Groups	32.442	417	.078		
Total	32.901	421			

Since the study revealed a significant difference in students' environmental knowledge among parents' income categories (Figure 2), an additional test was employed to realize the level of formal education of parents. A cross-tab test was conducted among parents and the results were demonstrated in percentages. Parents were divided into two groups of "university attended" and "not university attended" parents. As is shown, the average of minimum level of formal education in parents was observed in the income group of RM15,000-30,000 per annum. This category that is ranked as the most populated group ( $N=134$ ) appeared with only 11.5% of university educated parents while this number even for parents with the income lower than RM15,000 per annum was 18.3 percent. It is notable that more wealthy parents with income of more than RM60,000 per annum showing 54.6 percent of university attended parents (Figure 3).

Figure 2 The parents who attended university against non-university attended in percentage

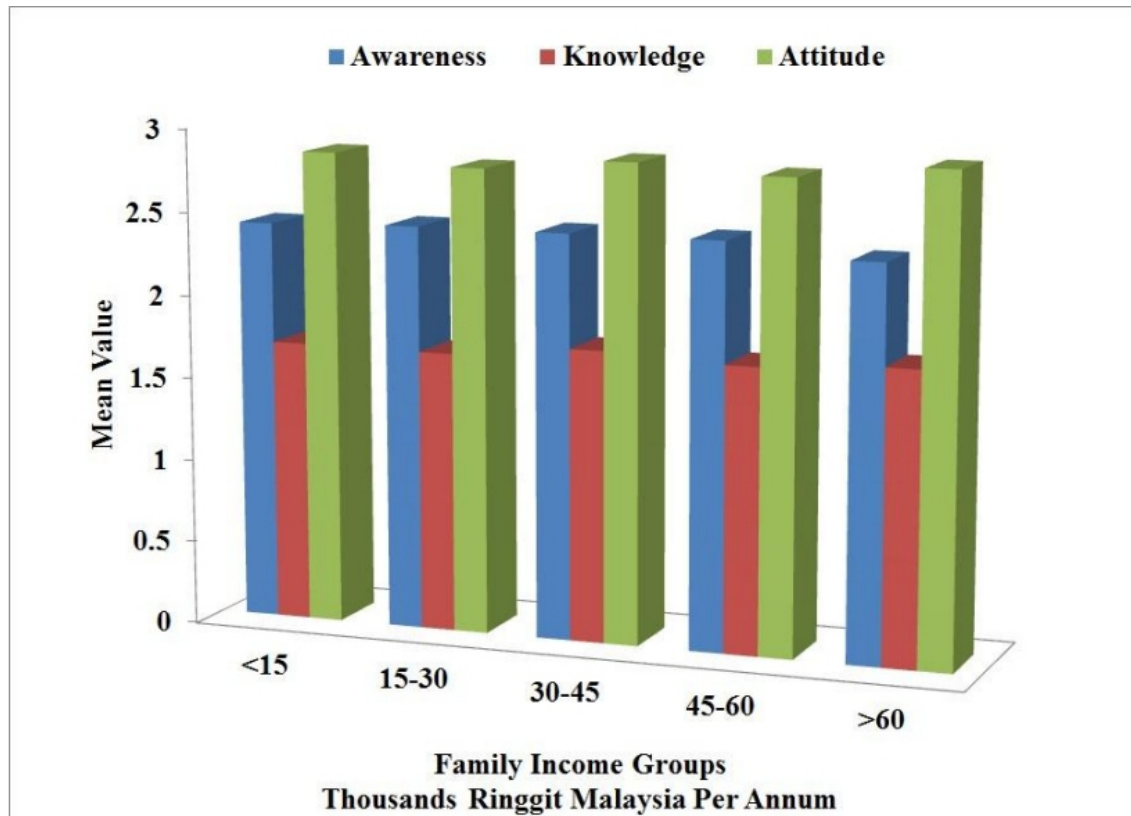
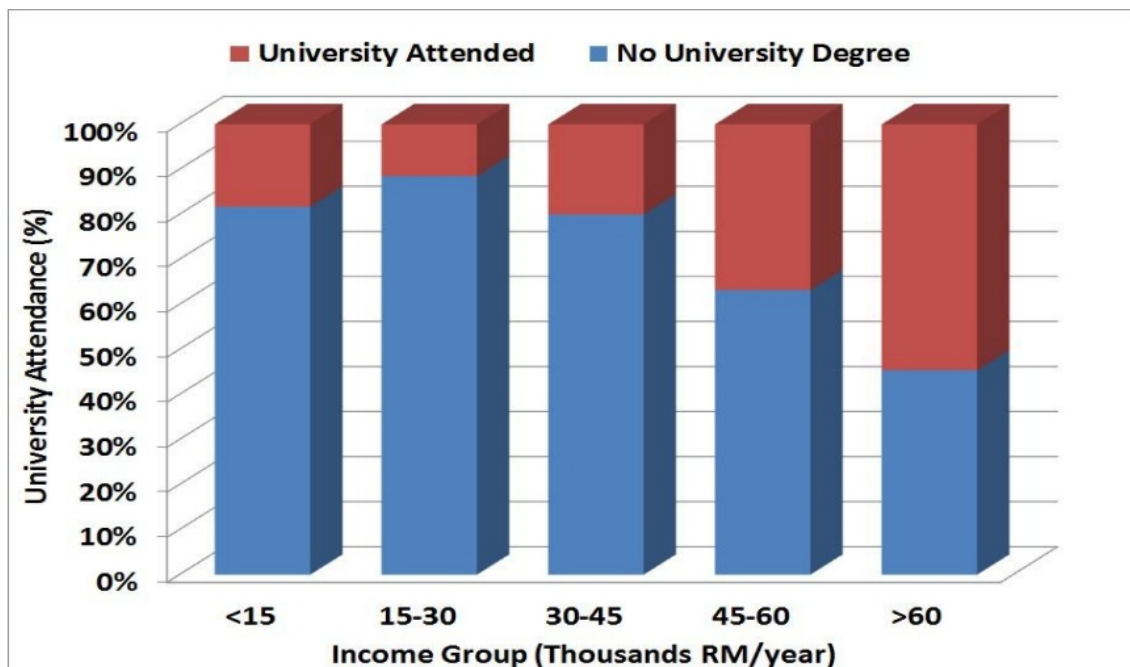


Figure 3 Comparing Mean Values of Awareness, Knowledge and Attitude of Students among Various Family Income Groups



#### 4. Discussion

There are 5 categories of family income to compare students' awareness, knowledge and attitude on environmental topics. In general, environmental knowledge was ranked a maximum while awareness

was in minimum range. The Attitude was placed in the middle with the value of 2.84 as the average score. This observation however is different with those reported by Hausbeck et al. (1992) and De le Vega (2006) where knowledge was reported lower due to the different scaling. Figure 3 shows fluctuations of three studied items of awareness, knowledge and attitude among family income groups. In this figure knowledge had the highest values compared to attitude and awareness. The gap between knowledge and other items suggests a missing venue for adequate plan such as media to influence public in their environmental awareness and attitude Coyle(2005). 4.1 Environmental Knowledge: Poverty vs. Wealth We still are doubtful about the levels of poverty and the definition of poverty Malaysia. There are various definitions such as the term adopted by the National Bank of Malaysia Malaysian Department of Census(2010), indicating an annual income amount of less than RM12, 000 as the poverty line. There are other definitions such as UK Global (World Bank, 2010) that is partially in agreement with the mentioned Malaysian standards. There is an agreement that right above the poverty line is not assumed as wealth since families still suffer and struggle from the limited income. In this research, we have found that responses to environmental educational items are very similar among groups under and right above the poverty line. However, these are significantly different from the higher income groups. Bucknall et al.(2000) emphasized that poverty and environment are in a sophisticated correlation according to the local socioeconomics and macro-economics in larger scales.

The study among various income groups showed no significant difference except for the topic of environmental knowledge. Environmental knowledge has shown to be significantly different among certain income groups. In general, income groups of below RM15, 000 and RM15,000-30,000 per year show similarities with negligible difference in their presented means of the knowledge item. The income group of RM30, 000-45,000per year appeared significantly different from other groups. This result is in agreement with those reported by De La Vega(2006) mentioning the effect of family income in certain environmental education topics in the United States. Other studies reported various trends mostly showing limited changes in environmental items. For instance, De La Vega (2006) reported these changes only for environmental attitude among students in the United States where their family income is concerned.

Income is an important social factor in socio-economic studies where environmental education is measured. Rovira (2000) reported that most socio-economic factors such as family income were observed to affect the levels of environmental education in student groups. Furthermore, the level of economic development of societies affects the trend of this understanding about environmental education factors. Poverty and wealth in communities are a dynamic process where change happens in time. This trend might affect the understanding processes among societies where the economy facilitates more environmental involvement. O'Brien (2007) emphasized that economic development factors in society may provide a better understanding of the environmental factors among students resulting in a meaningful contribution towards environmental protection. In this research, higher income families showed significant differences when compared with lower income groups. A significant improvement in understanding environmental topics is possible over various family income groups not only for attitude and awareness but also for knowledge where incentive packages encourage them to get themselves involved in related activities Swinton et al.(2003). In general, income has shown a positive correlation with awareness, attitude and knowledge Digby(2010).

Income is an important key component where detrimental environmental effects were reported from imbalanced income distribution of families Dunn(2002). Poverty is in a cause-effect relationship with

the environment Bekalo&Bangey(2002). Poor people may cause problems for the environment and likewise a damaged, polluted and/or degraded environment cannot properly support the people's survival. This matter was emphasized by other scientists showing a meaningful relation between poverty and environmental degradation Odoemeneet al.(2011); Obi(2000). While lower income groups are potential threat to the environment, they might use less resource (due to poverty) and consequently cause limited environmental damages comparing with wealthy communities. Moreover, the current research has been evaluating the perception factors of students than the actual environmental damages.

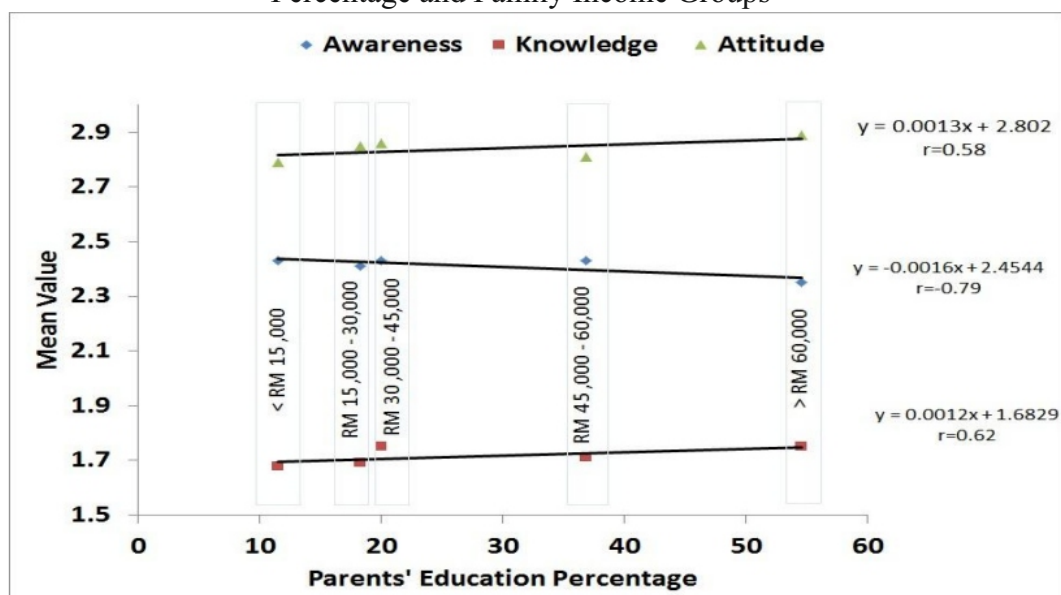
#### **4.2 Awareness and Attitude: Public Homogeneity among Income Groups**

The study found no significant differences in environmental attitudes and awareness among students who participated in the survey. Both attitude and awareness showed higher levels of mean than the knowledge item (Tables 1 and 6). The mean values for attitude (ranging from 2.79 to 2.89) were significantly greater than mean values for awareness (ranging from 2.35 to 2.43). However there was no significant difference observed among various income groups. There are a couple of reasons for this observation. Firstly, the subject of environmental awareness and attitude appears much easier to understand than the knowledge. Secondly, respondents reply to the questions according to their general feelings and moral viewpoints which make it a public issue rather than a scientific fact. This is why Madsen (1996) believes more in environmental awareness and attitude than knowledge for a better future of a sustainable society. Awareness has strong positive correlation with key factors in environmental management system that guarantees sustainability Sammalisto&Brorson(2008). For instance, the encouragement of public to recycle and reuse their home appliances is highly influenced by educational program to promote sustainability and mitigate environmental pollution effects Huang et al.(2006).

A similar trend to this observation was previously reported from certain group of foreign students in Malaysian universities Aminrad et al.(2010). In another report from Minnesota State, Digby (2010) demonstrated equal levels of attitude and awareness among adult respondents. Since the topics of awareness and attitude are easy to understand and show a public homogeneity among respondents as well as students from several research studies, it is suggested that environmental education should start from a very early stage of children's formal education Shim(2008). As a logical consequence, an environmentally well-educated public generates more environmentally responsible citizens De Le Vega(2006). 4.3 Parent's Education: A Possible Influence Parents were evaluated for their level of formal education. The results are shown in Figure 2. The main results of the study show that students with the lowest environmental knowledge come from families with annual income of RM15, 000-30,000 per year. The study found that, this group includes less educated parents. In this group 88.5 percent of parents have formal education equal to or less than diploma. Only 11.5 percent of them attended some university courses from undergraduate to PhD. The values of parents' level of formal education for higher income groups increases rapidly from 20 (RM 30,000-45,000 per year) to 54.6 percent (>RM 60,000 per year).

The level (percentage) of parents' formal education (X axis) was plotted against the achieved mean values of statistical results in awareness, knowledge and attitude (Y axis) among students. Then a separate set of family income data was merged into the graph for a better understanding of the results. A trend line was plotted individually for each set of mean values (awareness, knowledge and attitude independently). A correlation test was implemented between parents' level of formal education and the mean values (AKA). The graph is shown in Figure 4.

Figure 4 Cross-Plots and Correlation Analysis of Mean Values against Parents' University Degree Percentage and Family Income Groups



This study has found no significant relationship between students' knowledge and parents' level of education at 0.05 (sig=0.13) however it showed a meaningful moderate mathematical correlation (Equation 1).

$$Y = 0.0004x + 3.1002 \quad (r = 0.62) \quad \text{Equation 1}$$

The equation for the students' awareness was negative in both constant number ( $a = -0.0016$ ) of equation and the correlation value ( $r = -0.79$ ). The same trend as knowledge was found in the attitude item. Students' Attitude was shown to be in a positive but moderate correlation ( $0.4 < r < 0.7$ ) with the level of formal education of their parents (Equation 2).

$$Y = 0.0013x + 2.802 \quad (r = 0.58) \quad \text{Equation 1}$$

The Ministry of Education (MOE) Malaysia has not included an independent environmental subject in the formal curriculum of students Nadson&Shidawati(2005). Thus, students are not expected to gain this environmental knowledge from their schools and teachers where teachers have independently shown a fair level of environmental concern Said et al.(2003). Moreover, Said et al. (2003) concluded that teachers have always difficulty understanding the causes of environmental problems. Meanwhile, the public does not depend on formal education to improve environmental decisions of the authorities Ramsey & Rickson(1976) and Chukwuma(1998). These studies indicate that the main factor resulting indoor environmental quality is poor awareness on the part of citizens. We have realized that the level of parents' formal education contributes to the environmental education of their children. The general public as well as students probably gain this environmental understanding at home either from their parents or other possible sources such as media since it is not provided by the education system.

#### 4.4 Mass Media and Entertainment: A Possible Source of Learning

The impact of media was not reported in this research since it was beyond the objectives of the research. The study has revealed the possibility of impacts on the level of environmental awareness, knowledge and attitude of the studied groups from parents' level of formal education. The results were consistent with the family levels of income. Both family income and parents' education suggested the same trend of students' progressive levels of environmental understanding. Item such as knowledge has shown



higher mean than “awareness” and “attitude”. This is however sounds promising but this study suggest a public source of environmental education since formal education does not include much environmental topics at schools. Several studies have highlighted the effects of public media and entertainment on environmental educational topics Karimi(2006); Arduni(2000); Strong (1998); Yun(2002); Chung & Poon(2003); Sehat(2000) and Coyle(2005). The mass media was reported to be a leading source of environmental education Coyle(2005) to influence the public to become more supportive of environmental actions Chan(1998). This was reported previously by TKFF (2004) where public health subjects were concerned. Mancl (2003) reported that people with a low level of environmental perception and family income do not take environmental actions. Moreover, they concluded that television is a leading source of environmental education.

## **5. Conclusion**

This study evaluated the role of parents’ income and education levels on environmental knowledge, awareness and attitude of students who study in Form Four (16 years old) in Kajang Town, Selangor, Malaysia during 2011. There were 470 students who have been participated in this research. A questionnaire was used as measurement instrument. The data were analyzed using statistical tool of ANOVA. The study concluded that income and education of families were influential components on students’ environmental understanding. Government as policy maker is suggested to promote more public wealth in the country. Educational materials and school syllabuses may reveal prominent level of environmental knowledge amongst public. Thus further environmentally oriented subjects in school syllabuses are suggested to provide higher level of environmental knowledge. Both environmental awareness and attitude have shown similarities in various economic and educational groups.

Mass media was claimed as a preferred method for public education in the studied groups in this research suggests more involvement of environmental topics in public radio and television programs and newspapers’ headlines. The educational secretariats of the country may consider reviewing of essential and compulsory school educational materials. Public with elevated level of environmental perception throughout adequate and wise educational and economic programs may provide cost effective long term sustainability. The study implicates that the components of environmental education (awareness, knowledge and attitude) must be inserted as the added value across current schools’ curriculum to promote environmental understanding. These added values may influence public in general as well as students in particular to encourage higher public environmental involvements in the society. As a result, the future decision makers with accompanying of environmentally literate public approach cost-effective sustainable development. This may avoid costs of compensation in nature deterioration and save expenses on fundamental environmental problems such as public wealth improvement and development of environmental infrastructures. The study recommends further researches to investigate the role of educational policies and mass media on public environmental perception.

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# Investigating the Relationship between Brand Attributes and Brand Loyalty among Tooth Paste Users in Greater Accra Region of Ghana.

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## **ABSTRACT**

The purpose of this study is to investigate the association between brand attributes and brand loyalty among tooth paste users in Greater Accra region of Ghana. The main objective is to examine the relationship between brand attributes on brand loyalty. Four hundred and twenty one (421) copies of questionnaires were retrieved through convenient sampling method. With the aid of Statistical Package for Social Sciences (SPSS) the following statistics were employed: Descriptive statistics, Cronbach's alpha, Kurtosis and Skewness and Regression analysis were used to measure the relationship of independent variables (packaging, price, and brand awareness) on dependent variable (brand loyalty). The findings revealed that all three attributes of brand; packaging, price and brand awareness had a significant and positive relationship with brand loyalty. The research suggests that tooth-paste producers in Ghana should adopt green packaging marketing strategy to outwit multinational competitors.

**KEYWORDS:** packaging; pricing; awareness; branding; consumer behavior

## **1. INTRODUCTION**

This study is to investigate the relationship between packaging, price and brand awareness on brand loyalty. By definition, brand loyalty is the consumer's emotionally-charged decision to purchase a specific brand again and again. The consumer perceives that the brand meets their expectations and identifies with the consumer on a personal level. Brand loyalty is based on an emotional involvement that develops between the consumer and the brand. The consumer's perception is that the brand fulfills some kind of physical need or emotional want in such a unique way that some kind of emotion is evoked during the purchase process and while using the brand (Susan G. 2000). Decision making process to buy a product can be conscious or unconscious, but it is always based on trust that the brand will deliver on the consumer's expectations for it. Brand loyalists do not purchase a substitute brand if their preferred brand is not available. Customers would not mind to travel to multiple stores in search of their preferred brand and are more likely to forgo making a purchase if their brand cannot be found than they are to purchase a substitute (Susan G. 2000).

Brand loyalty is the mind-set that persuades a customer either to revisit a company, shop or outlet to purchase a particular product, service or brand there again. (Jessy John, 2010). All loyal customers build businesses by buying more, paying premium prices, and providing new referrals through positive word of mouth over time (Ganesh et al., 2000). Brand loyalty is closely related to the company's continued survival, and to a company's future growth. Hence, for a company to maintain a stable profit level in a fierce competitive market striving to retain existing customers is more important than an aggressive one, which expands the size of the overall market by inducing potential customers (Ahmad and Buttle, 2002).

It is always cheaper to retain existing customers than it is to acquire new customers, and brand loyalists aren't just repeat purchasers. They are also vocal brand advocates that create word-of-mouth marketing which turns into new business. Building brand loyalty should be a strategic imperative for every business (Susan G. 2000). Product-related attributes associated with packaging, pricing and brand awareness, inter alia, tend to create and reinforce the relationship between the consumer and the brand (Suresh et al. 2012). Consumers respond to packaging based on a set of prejudices, learned reactions and individual preferences that help to catapult certain products to dominance in today's dynamic markets (Aaker, 2010). Certain shapes, colours, sizes and textures naturally influence consumers to respond positively, whilst others evoke negative reactions (Aaker, 2010).

## **LITERATURE REVIEW**

Shopping around is time and energy consuming, and most consumers do not always possess enough product knowledge to ensure the best buy. Under such circumstances, consumers usually purchase well-known brands, which may result in higher costs but requires less research efforts. Thus, brand image not only affects how consumers view a product but has the benefit of lowering purchase risks (London et al. 2008). According to Rowley (2005) opportunities are exhibited through the increased emphasis placed on improving the quality of packaging, maintaining competitive pricing and creating loyalty amongst customers. Product related attributes associated with packaging, pricing and brand awareness, tend to create and reinforce the relationship between the consumer and the brand (Suresh *et al.* 2012).

### **Brand attribute constructs**

#### **Packaging**

Packaging may be perceived as a family of activities that are concerned with the design, production and filling of a container or wrapper of the product item in such a way that the product can be effectively protected, stored, transported and identified, as well as successfully marketed (Kent and Omar 2003). An often-overlooked component to identify the packaging of a particular manufacturer standing on the shelf distinguishes it from other competing brands (Cronje et al. 2003). Wright (2006) also acknowledges that packaging is effective in marketing products since most consumers are greatly affected by appearances and design of the product, in addition to other aspects such as touch, taste, texture and smell. Packaging appears to be one of the important factors in purchase decisions that are made at the point of sale where it becomes an essential part of the selling process (Silayoi and Speece, 2004). In current competitive retail environments, consumers are exposed to a plethora of messages on packaging and merchandising (Klevas, 2005). When consumers are spoiled for choice in terms of the available product range, they rely on product externalities, such as packaging, as signals of perceived quality (Rundh, 2005). This presents marketing with a challenge to depend heavily on the visual communication of packaging to inform and persuade consumers, both at the point of purchase and at the point of consumption (McNeal and Ji, 2003). Communicating the right product and brand values on packaging is paramount in order to achieve the appropriate level of aesthetics and visual impact (Mowen and Minor, 2001). With the move to self-service retail formats, packaging increases its key characteristic as the „salesman on the shelf“ at the point of sale (Silayoi and Speece, 2004).

#### **Price**

Price, which is an enduring element of the original Ps of the marketing mix, may generally be perceived in terms of the specific monetary value that a customer attaches to goods and services (Kent and Omar, 2003). Goods and services must be priced in a way that achieves profitability for the company and

satisfies customers, in addition to adapting to various constraints such as competition (Sahay, 2007). Price presents a unique opportunity to create loyalty, retain existing customers and attract prospective customers (Sahay, 2007).

In this way consumers evaluate whether a price is too low or too high as they make their product choices. When a consumer perceives that a retailer charges high prices for a product, the consumer also perceives that the retailer possesses an air of luxury, which may lead to repeat purchases (Dunne and Lusch, 2008; Yesawich, 2004). This strategy is premised on the view that for some consumers, high price simply means giving up more resources for the product whereas some consumers perceive that high prices are a signal of better quality and prestige (Jin and Sternquist, 2003). Overall, it is important for marketers to choose price communication strategies, both at the point of sale and by the means of various media forms, which are capable of drawing consumers' attention to the product's value and thus inducing them to buy (Romani, 2006).

### **Brand awareness**

Brand awareness is an important indicator of consumers' knowledge about a brand, the strength of a brand's presence in the consumers' minds and how easily that knowledge can be retrieved from memory (O'Guinn, Allen and Semenik, 2009). There are two main types of brand awareness, namely „aided awareness“ and „top of the mind awareness“ (Farris et al. 2010). Aided awareness occurs when a consumer is provided with a list of brand names and they recognize the brand from the given set whereas „top of the mind awareness“ occurs when the name of the brand is automatically recollected because the consumer very promptly associates the brand with the product category (Keller, 2008). Brand awareness influences consumer decision-making in various ways. For instance, consumers may use brand awareness as a nominal anchor in their purchase decisions (Hoyer and Brown, 1990). When consumers know a certain brand, they tend to include that name in their personal consideration set (MacDonald and Sharp, 2000).

### **Brand loyalty**

Brand loyalty is a measure of the extent to which consumers are loyal to a particular brand over a period of time, which emphasizes a consistent repurchase of the same brand (Sheth and Mittal, 2004). Brand loyalty results in an emotional attachment to the brand, which is driven primarily by commitment and affection (Hawkins, Best and Coney, 2001; Seetharaman, Nadzir and Gunalan, 2001). The consumer develops affection for the brand in a manner similar to a friendship (Ball, Coelho and Machas, 2004). Brand loyalty can develop through identification; the consumer believes the brand reflects and reinforces some aspects of the consumer's self-concept (Petromilli, Morrison and Million, 2002). A positive brand performance experience may seek that reward again through repeated usage (McKee, 2010).

Brand loyalty arises from habit and long history of brand usage (Chaudhuri, 1995; Neslin, 2002). For example, a consumer who used a particular brand five years ago and had a good experience with it in terms of quality and performance is more likely to use the same brand today and in the future (Briesch, Chintagunta and Fox, 2009). Furthermore, if consumers saw a brand being used in their parental home as they were growing up, they are likely to view this long history of use by parents as testimony to the brand's goodness and are likely to maintain its usage (Sheth and Mittal, 2003). Positive word-of-mouth communications from a committed customer increases both the probability of the recipient becoming a customer and of the recipient sharing the positive comment with a third person (Hawkins et al. 2001).

Even when loyal customers purchase a different brand to take advantage of a promotional deal, they generally return to their original brand for their next purchase (Chaudhuri and Holbrook, 2001).

### Relationship between brands attributes and brand loyalty

A study conducted by Bed (2008), which focused on existing practices of branding, packaging and labeling of new products in consumer product manufacturing units, reveals that the right packaging can help a brand to carve a unique position in the marketplace and in the minds of consumers. Hysen and Mensur (2008) reveal that packaging has a great positive effect on the purchase of dairy products. Ahasanul and Ali (2009) also found that packaging plays an important part in its latent ability to reflect the product attributes to unsuspecting and otherwise disinterested consumers (Gonzalez and Twede, 2007). Most of the packaging decisions affect how consumers associate themselves with a firm's products (Del Rio, Vazquez and Iglesias, 2001). Packaging also adds exceptional value to products (Underwood, Klein and Burke, 2001) and is a vital product differentiation tool that has a beneficial stimulus effect on the buying behavior of consumers (Wells, Farley & Armstrong, 2007). It attracts the consumers' attention to a particular brand, enhances its image and influences consumers' perceptions about a product (Vila and Ampuero, 2007). Price is one of the tools marketers may use to confront the market, either by directly attracting and retaining clients or fighting against competitors (Boonlertvanich, 2009). Moreover, price presents a unique opportunity to create loyalty, retain existing customers and attract prospective customers (Sahay, 2007). An assortment of pricing strategies may be employed to manipulate the purchase behavior of consumers (Cataluna, Franco & Ramos, 2005). Well known brand is likely to perform better in the marketplace than a lesser-known brand (Yoo, Donthu and Lee, 2000). Brand awareness therefore has the effect of increasing brand market performance (Huang and Sarigöllü, 2012). These insights demonstrate that brand awareness is also an important contributor to the purchase decisions of consumers.

Based on reviewed literature conceptual frame work was designed

### Conceptual frame work

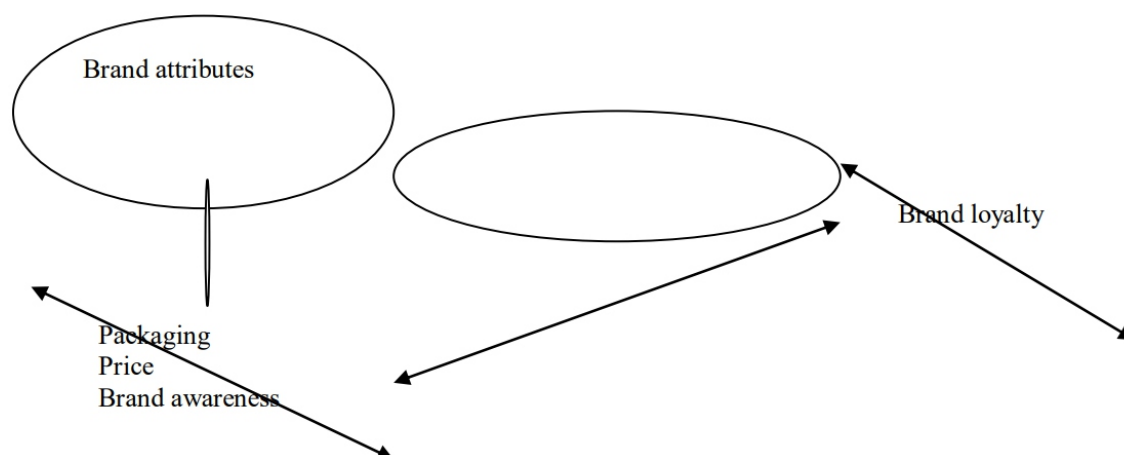


Fig.1: Relationship between brand attributes and brand loyalty

**The research hypothesis was as a result of literature reviewed and conceptual frame work.**



## Research Hypotheses

H1: There is a significant positive relationship between packaging and brand loyalty

H2: There is a significant positive relationship between price and brand loyalty

H3: There is a significant positive association between brand awareness and brand loyalty

## Problem of the study

Research shows refusal to brush teeth regularly result to tooth decay. The human's mouth hides bacteria capable of affecting other parts of the body through the bloodstream. The Ghanaian tooth paste market is made of both local and foreign brands for customers to select from: Colgate, Crest(toothpaste), Armand, Hammer, Bainca(brand), Closeup, Pepsodent, Aquafresh, Babool, Cibaca, Darlie, Doramad, Radioactive(toothpaste), Elmex, Euthymol, Solidox(toothpaste), Sensodymen, Signaln(toothpaste), Sozodont, Stomatoli, Panaalodont, Kolynos, Pepsodent, Ritadent, Anitadent, Promise(brand), Rembrandt(toothpaste) and Mentadent to mention but a few. This has resulted into fierce competition. Marketers have no choice than to directly attract and retain clients or fighting against their competitors (Boonlertvanich, 2009). Well-known brand is likely to perform better at the marketplace than a lesser-known brand (Yoo, Donthu and Lee, 2000). An assortment of marketing strategies needs to be employed to manipulate the purchase behavior of consumers in this situation. (Cataluna, Franco and Ramos, 2005). According to Hysen and Mensur (2008) packaging has a great positive effect on the purchase of product.

Brand loyalty is the company's continued survival, and future growth. Hence, for a tooth paste manufacturers and importers to maintain a stable profit level in a fierce competitive market striving to retain existing customers is more important (Ahmad and Buttle, 2002). However, there has been no or little effort to investigate factors that lead to brand loyalty in the tooth paste industry. The study holds answer to what are the construct of brand loyalty in the tooth paste industry in Ghana?

## Objectives of the study

The purpose of this study is to examine the association between brand attributes and brand loyalty. The specific research objectives of the study are:

- To evaluate the relationship between packaging and brand loyalty
- To investigate the relationship between pricing and brand loyalty
- To access the relationship between brand awareness and brand loyalty

## METHODOLOGY

Both primary and secondary data were used in the study. The study adopted purposive sampling technique to select shopping centers whereas convenience sampling techniques were employed to select a tooth paste customer. The suitable sampling technique for this study is non-probability technique using convenience sampling. This is due to the difficulty in determining the specific list of customers.

## Participants

The target population comprised consumers who purchased various brands of tooth paste and falls

between the ages of 18 and 60. Besides, 421 out of the 600 individuals who were requested to participate in the study returned the questionnaires. Respondents were recruited from Tema and Accra Shopping Mall and A&C shopping mall in the Greater Accra Region of Ghana.

### Data collection

Data were collected through the use of a structured questionnaire. The questionnaire was divided into five sections. Section A elicited general and biographical information about respondents. Section B elicited information on respondents' perceptions of packaging; section C sought information on respondents' perceptions of price. The questions in Section D sought information on brand awareness and Section E sought information on brand loyalty. The questionnaire was administered on three consecutive holidays, Farmers' day, Christmas day and Boxing Day all in the month of December 2012. Holidays were selected as they are the busiest shopping days in Ghana. Once the data is collected and entered to computer using SPSS. The following statistics were used: Descriptive statistics in order to have clear picture of study variables. Cronbach's alpha, which measures the internal consistency of a construct, Kurtosis and Skewness values were used to check the normality of each variable used in the research. Regression analysis was used to measure the effect of independent variables on dependent variable.

### Regression analysis

Regression analysis was undertaken in order to examine the correlation more closely and to examine the effects of the independent variables on the dependent variable. To test predictive relationships, packaging, price and brand awareness were used as the independent variables and brand loyalty was used as the dependent variable.

**Table 2. Supporting literature for measurement scales.**

Construct	scales
Packaging	[41,56]
Price	[44,48]
Brand awareness	[49,58]

All of the measurement scales used, as indicated in Table 2, were based on previous research. Assuring the validity and reliability of the measures required supporting literature to validate the scales which were used in the research constructs. The customer retention construct was measured using the scales and indices included in the work of (Suresh et al. 2012) who used the following variables to determine the construct of brand attributes: price, packaging, labeling, brand image, quality and brand awareness. As shown in Table 2, internal marketing construct were measurement scales adapted from previous studies.

### Sample composition

Amongst the respondents, 54% were female and 46% were male. A majority of the respondents (64%) were aged between 25 and 45 years. Furthermore, approximately 51% of respondents were married, 46%



were single and 3% were either divorced or widowed. With regard to the frequency of buying tooth paste, approximately 45% of respondents attested to the fact that they ordinarily buy tooth paste once in a cycle of one month approximately 37% attested that under ordinary circumstances, they buy tooth paste twice in a cycle of one month whilst 18% of the respondents attested that they buy tooth paste once in a cycle of three weeks.

**Table 3. Values of Cronbach's alpha for the research construct**

Construct	Value
Packaging	0.635
Price	0.706
Brand awareness	0.834

(Source field work, 2013)

A reliability test was carried out using Cronbach's alpha, which measures the internal consistency of a construct. The recommended minimum acceptable limit of reliability measure, as reported by (U. Sekaran, 2003) is 0.60. As shown in Table 3, all the constructs passed the reliability test.

**Table 4. Descending means of the constructs Customer loyalty**

Construct	Mean	Standard deviation
Packaging	4.054	0.764
Price	4.765	0.876
Brand awareness	4.097	0.534

(Source field work, 2013)

The result shown in Table 4 indicates frequency and descriptive statistics used to determine the relative importance of each of the constructs. The competitive priorities shown in Table 4 have a mean above 4. Therefore it concludes that all of the constructs are of significant importance to the study.

**Table 5. Skewness and Kurtosis for research constructs. Variable**

Variable	Skewness	Kurtosis
Packaging	-0.345	-0.504
Price	-0.254	-0.07
Brand awareness	-0.532	-0.65

(Source field work, 2013)

From Table 5, Kurtosis and Skewness values were used to check the normality of each variable used in the research. Skewness values larger than (+1) or smaller than (-1), as suggested by Hair J., Babin B., Money A. and Samuel P. (2003) indicate a substantially skewed distribution. Besides according to Hair J., Anderson R., Tatham R. and Black W. (1998) added that a curve is too peaked when the Kurtosis exceeds (+3) and is too flat when it is below (-3). This means Skewness values within the range of (-1)

to (+1) and Kurtosis values within the range of (−3) to (+3) indicate an acceptable range. As shown in Table 5, the values of Skewness and Kurtosis for each variable indicates that the research constructs fell within the acceptable range.

**Table 6. Model summary**

Model	R	R Squared	Std. Error of the Estimate
1	0.721	0.691	0.175

(Source field work, 2013)

The results of the multiple regression analysis, as shown in Table 6, R determines the correlation between brand attributes and brand loyalty. These explain that the correlation between the two variables is .0721 which signifies a strong positive relationship. Besides, the result reveals a coefficient of determination, R<sup>2</sup>, which predicts the relationship between the independent variables and dependent variable, of 0.691. This means that 69.1 percent of the total variance in the dependent variable (brand loyalty) is accounted for by the independent variables (packaging, price and brand awareness). This result affirms that the three construct of brand attribute is significant in creating brand loyalty.

**Table 7. ANOVA result model**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.865	2	.432	110.014	.000(a)
	Residual	75.254	199	.378		
	Total	76.119	201			

a) Predictors: (Constant), pricing, brand awareness

b) Dependent Variable: brand loyalty

(Source field work, 2013)

The results of the F-ratio, as shown in Table 7, indicates that the regression model is significant at  $p < 0.001$ . It can be concluded, that the regression model predicts brand loyalty strongly. In other words, brand attributes construct: packaging, price, and brand awareness (the independent variables) have the ability to predict customer loyalty (the dependent variable).

**Table 8. Results of multiple regression analysis**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	4.492	.344		6.790	.000
	packaging	.085	.056	0.37	4.105	.000
	pricing	.081	.088	0.35	5.919	.000
	Brand awareness	-.131	.101	0.38	3.405	0.00

a) Dependent Variable: brand loyalty  
(Source field work, 2013)

The regression analysis presented in Table 8 reveals that the creation of brand loyalty is determined by brand attribute; packaging, price and brand awareness. Packaging has a beta value of 0.37. This means that Packaging explains 37.0 % of the creation of brand loyalty, at a p-value of .000. This explains a significant association of Packaging with brand loyalty. Pricing has a beta value of 0.35. This means that Pricing explains 35.0 % of the creation of brand loyalty, at a p-value of 0.000. This indicates a significant association of pricing with loyalty brand. Brand awareness has a beta value of 0.38. This means brand awareness explains 38.0 % of the creation of brand loyalty, at a p-value of 0.000. This shows a significant association of brand awareness with brand loyalty. Regression model is significant at  $p < 0.001$ . Therefore, all the hypothesized relationships between brand attributes and brand loyalty are accepted. Table 9 summarizes the research hypotheses and their results.

**Table 9. Summary of research hypotheses and result**

Hypothesis	Description	Beta	t-value	Comment
H1	There is a significant positive relationship between packaging and brand loyalty	0.37	4.105	Accepted
H2	There is a significant positive relationship between price and brand loyalty	0.35	5.919	Accepted
H3	There is a significant positive relationship between brand awareness and brand loyalty	0.38	3.405	Accepted

(Source field work, 2013)

## DISCUSSIONS

The first hypothesis showed packaging correlating positively with brand loyal. This supports the claim made by Hysen and Mensur (2008) that packaging determines brand loyalty. They explore the

relationship between packaging and brand loyalty on of a sample 82 shoppers. They revealed that packaging relates positively with brand loyalty. Besides Silayoi and Speece (2004) conducted a study on a purposively selected sample of 158 students to study the relationship between packaging and brand loyalty. They concluded that good packaging have high brand loyalty scores and vice versa. The second hypothesis was accepted because a significant relationship was established. This result is consistent with the findings of (Boonlertvanich, 2009; Sahay, 2007), they indicated that price of a product attracts new customers and retains existing customers to a brand. The third hypothesis was accepted because a positive relationship was established. This suggests that the higher the brand awareness level, the higher brand loyalty score. The result is consistent with a study conducted by Huang & Sarigöllü, (2012). Their research was on brand awareness and brand loyalty among retail shopper. (Ball et al. 2004; Campo & Yague, 2007; Underwood et al. 2001).

## **Recommendations**

Tooth paste producers in Ghana should adopt a lean and green marketing strategy in packaging. Besides engage customers and build long-term relationships through a two-way dialogue such as community relation activities, sponsorship of local festivals and educational programs Marketer should create good perception about their brand through realistic advertising. This is because profitable customers are born when a powerful brand's promise is fulfilled by a brand experience that exceeds expectations. Besides, producers of tooth paste should design different brands of paste for children, adult and the aged, currently there is one size and taste for all. Even though all the brands contain fluoride, it does not make the brands the same; certainly, marketers should emphasize on what makes their products different such as price, packaging and brand image so as to gain competitive advantage. Most tooth paste adverts in Ghana is about a Dentist endorsing a brand of paste to potential customers. The studies suggest that it is time to use celebrities as well. Their appearance, trustworthy, credibility and personality influence purchases.

## **Conclusion**

The purpose of the study was to investigate the relationship between brand attribute and brand loyalty. Based on the regression analysis on the data obtained from a sample of tooth paste consumers, the research concluded that there is a significant positive relationship between brand attribute and brand loyalty

## **Limitation and future research**

This research focuses on one Region of the country; therefore, further research in other regions may be necessary before generalization can be made on the entire country. Though convenience sampling method was adopted to select respondents it was not easy to catch the respondent's attention.

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# A Survey of Influential factors on the security feeling of female university students (Qom Azad University case Study ,1392)

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## ABSTRACT

The goal of this study is to survey the influential factors on the security feeling of female university students. The present study is a kind of applied investigation based on purpose and result, while at the same time It is concerned with descriptive investigation related to the procedure and gathering information. The statistic population of the research was selected from the Qom Azad University female university students. The research sample, following the case study with a glance to correlation study, consists 73 of such students who were randomly chosen. The tool for collecting the data was a researcher made questionnaire in which eleven factors were measured as the dominant elements on the feeling of security. The reliability of the data was confirmed based on Cronbach's alpha test. The major deductions of the investigations are as followings: Regarding the security feeling there is a significant implication between married and single ladies. There was also an obvious connection between the security feeling and satisfaction variables including appearance, family support, existence and trust in the police, and the employment of the students. In multiple regression analysis the variables such as trust in police, religious commitment, family support, and employment were detected as the priority order elements in achieving security feelings among the female university students.

**Key words:** the security of female university students, Qom Azad university, social security feeling

## Introduction and planning the question

Security or anti fear is an individual and social concern of mankind, so it can be considered as one of the basic perpetual requirements of man. Fearing of the past or future, which are respectively called grief and horror, seriously spoil man's psyche, hence they disturb the individuals' mental relaxation and accordingly they are no longer active in life. It seems that the word security has two basic and significant applications in culture and society. Sometimes it refers to individual psychoanalysis whereas in some cases it is attributed to social psychoanalysis. The present study is focused on analyzing the influential factors on the social security with the attention to social psychoanalysis subjects. In addition to surveying the impressive factors on social security of female university students, the existent investigation tries to provide some strategies for proper recognition of security.

Security exists in all aspects of human life. The terms such as national security, individual safety, social protection, aviation safety, and food safety all indicate that security is so pervasive. At the same time the presence of security in man's life is so obvious that no one makes question about it. However, without a doubt security is an inner part of the society and as Koestler states: The most obvious things are those which require more tests and reviews. (Koestler quotes from Volferz, 1962)

In fact security means the elimination of the threat, and removing the threat in itself is equal to efficient using of opportunities. So, It can be concluded that the security is relied on two essential elements as threat and using the opportunities, in other words, the establishment of security is equal to partial removing of the threat and efficient using of the opportunities. (Khalili, 1381, p.428). One of the vital requirements of every society is the social security which in objective sense is the recognition of lack of threats against the moralities and values. To express it another way, security in subjective form refers to the tranquility that the moralities and values no longer are attacked. (Moller, 2001, p.1) Nowadays, the outlook to social damages is viewed from different perspectives which is mostly concerned with the girls and women of the society consisting half of the population. Actually along with the development of the society the natural phenomena as poverty, rising the inflation, high costs of living and housing, and the same issues cause some kinds of disorders which lead to the insecurity and lack of participation among the women. (Neyazi and colleagues, 1390, p.132). According to the information presented, this study which is based on the information gathered from the female Azad university students seeks to examine the influential factors affecting the safety of the students.

### **History and background of the subject**

Each year a number of women between two to four million are abused. It is estimated that each woman during her lifetime is likely under the risk of violence for about 20 or 30 percent. Among the elderly women 1.8 are abused annually. In most countries, more than 20 percent of the women are exposed to the negative and unnecessary consequences of harsh violences. In some countries the studies have revealed that about 10 to 15 percent of women declare that they have been under the pressure to have sex relationship with their male sexual partners and close colleagues. Around the world 16 to 25 percent of women suffer from the physical violences of their male partners and It is stated that one of five women during her lifetime is raped or at least exposed to it. (WHO, 1380) In the workplaces many of women's rights are easily kept but at the same places sexual abuse is very common. Sexual harassment is likely the result of job authority or the position of employer to impose his sexual demands, such as when a woman is said to have sexual affairs with the boss, or she will be fired. Based on self report it is estimated that out of every ten women in the UK, seven women experience a long term sexual abuse during their career. (Giddens, 1388, p.219).

Whenever a person thinks that there is no security in the society, surely he doesn't feel personal security. As long as the women do not feel a sense of relief in public places, universities, schools, workplaces, etc. It is so obvious that they do not feel safe. Hence, all the social phenomena including the fear of rape and sexual harassment in working places can all be effective in the sense of security among women. As the outcomes of the social, cultural, economic requirement plans, carried out by presidential women's participation, indicate one chief problem of women is the lack of security which is among the first concern of women. Owing to this fact the presence of women's activity is limited in the public places and they are confronted with so many obstacles in social activities. (Noroozi and Foladi Sephar, 1388, p.132). It should be noted that without providing the personal security for citizens, it is impossible to establish and keep social security. Therefore, understanding the influential factors affecting the social security is the fundamental prerequisite element in promotion and protecting the social security. The studies performed by Sayyed Mirzaei and colleagues (1390) relating to emotional, financial, communication aspects of security entitled "Factors that influence the social security of women being the head of their families (including the widows and divorced ones)" proved that family supports, law applications, and the capabilities of such women who are under the three supporting organizations as Imam Khomeini Emdad Committee, Martyr organization, Welfare organization are considerably effective in providing

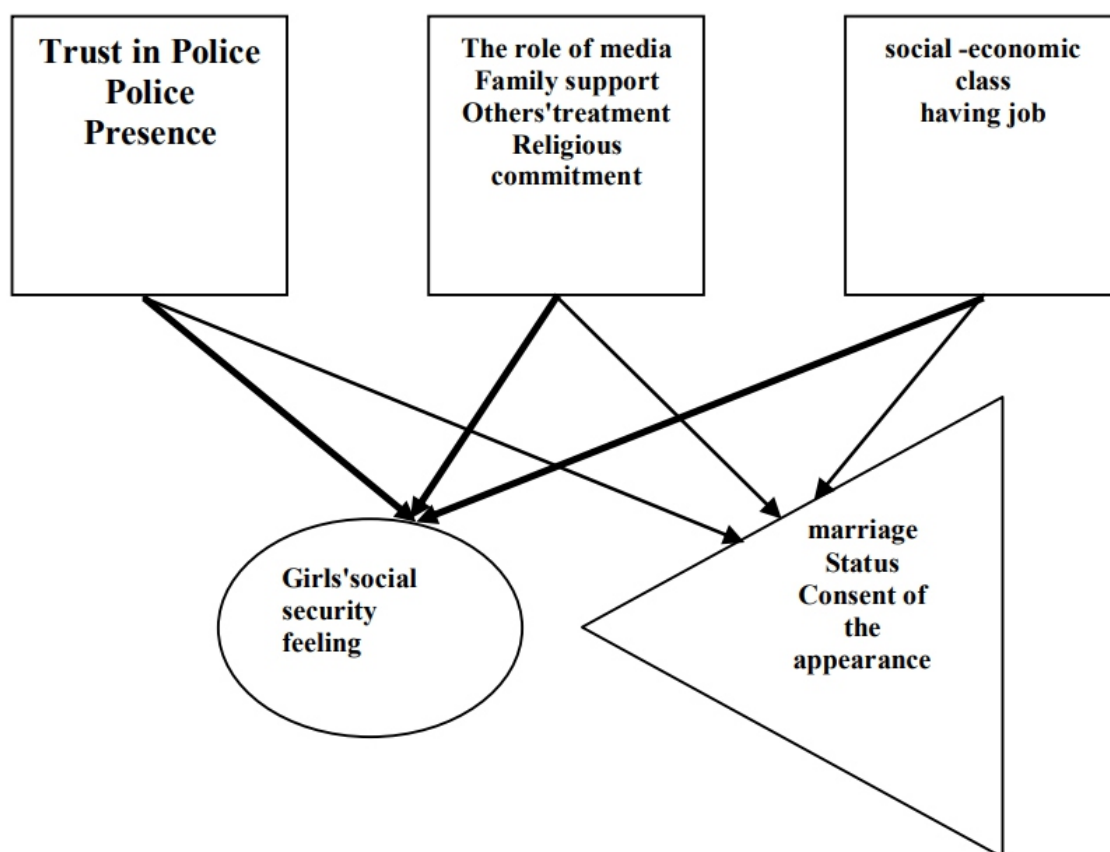


the security among the female headed households. Also, the findings confirmed the relationship between social security and supporting organizations. Kamrani and Ebadati Nazarloo (1389) in examining the impacts of social elements on the social security of M.A degree female university students of sociology in the universities of Tehran reported that the consequences of multiple regression indicate the five chief variables as family support, adherence to native customs, social class, age, and trust in law are responsible for safe and security feelings of such students. The five aforementioned variables in total include 89.5 percent of the effects of dependent variables. Nabavi and colleagues (1389) in an essay analyzed the influences of socio - economic factors and ethnic identity on feeling of social security. The security feeling of the population of this study is investigated from three dimensions: political security, financial security, and body security . The main findings of the study indicated that among all the proposed factors the socio -economic status and national identity have increasing effects on the social security feelings while the two variables as partial deprivation and feeling the lack of power hold decreasing impact on the feeling of social security .The sense of powerlessness is directly influential on ethnic identity and adversely on national identity.

Moreover , the factors of ethnic identity and gender were respectively influential on the feeling of body security and financial security. Mirzahossieni (1388) in a paper entitled "A survey of the social security of Qom women" has examined this issue .He announces that the consequences of insecurity of women is not restricted just among them, rather than it is generalized to children, family members and the entire community. Based on the results ,Mirzahossieni declares that the population of his study reveal an average level of social security feeling. Among the basic factors of social security, the best reply of respondents is related to family context whereas the worst cases are concerned with cultural and economic security. In this regard the respondents' reply to the factors as environmental, political ,and health security was an average one . Noroozi and Pholadi Sepher (1388) in an explanatory essay investigated the social factors affecting the social security of women between 15 to 29 years old in Tehran. The statistic deductions of the study proved that the variables such as security feeling, place of residence, socio - economic status, and feeling of social order have direct and positive impact on social security feeling of women ;however , the variable of adherence to religion has negative effect. Multivariable regression analysis also showed that the aforementioned variables have respectively the most and the least important role in providing the social security feeling of women. Zangiabadi and Zangana (1390) in their essay under the title " The assessment of social security feeling of the citizens of border towns " found out that variables including the security feeling, place of residence, socio economic status, and feeling of social order have direct and positive impact on social security feeling of women ,but the variable of adherence to religion has negative effect. Multivariable regression analysis furthermore indicated that the aforementioned variables have respectively the most and the least important role in keeping the social security feeling of women. Navidnia in an essay discusses the concept of social security with the respect to theoretical reflection .Having differentiated the concept of social security from national and public security, he states that the realization of social security opens the horizons of interactions in various social groups and strengthens friendship among them .Based on the study, the social security is supplied for the community so that from the childbirth all the ethnic and religious groups who have active roles both inside and outside the country be protected.

#### **4. Conceptual Model of the factors affecting the security**

**Figure (1) -Conceptual model of the factors affecting the social security feeling of female university students**



## Research Methodology

The present study is a kind of applied investigation based on purpose and result, while at the same time it is concerned with descriptive investigation related to the procedure and gathering information. The statistic population of the research was selected from Qom Azad University female university students. The research sample, following the case study with respect to correlation study and lack of generalization to all university students, consists 73 of Azad University students who were randomly chosen. (Delavar 1391). The tool of the measurement of this study is a questionnaire with some variables based on the conceptual model of Jahangiri. (Jahangiri 1392, pp.41-55). Some components contain one question, and some ask two or more questions. (Jahangiri 1392, p.49). The reliability of research tool in Jahangiri's investigation is reported as follows: consent of the appearance 0.79, use of mass media 0.81, family support 0.73, others' treatment 0.86, religious commitment 0.72, trust in police 0.84, police presence 0.88, and the sense of social security for women 0.82. (Zangiabadi and Zangana 1390), (Noroozi and Foladi 1388). (Cohen 1385), (Nabavi and colleagues 1389). In this study the reliability of the variables obtained as follows: economic situation 0.73, consent of the appearance 0.73, use of mass media 0.74, family support 0.72, other's treatment 0.73, religious commitment 0.72, trust in police 0.68, police presence 0.70, and the sense of social security for women 0.71.

## 6. Deductions

According to the consequences resulting from descriptive statistics, the average age of married and unmarried students were respectively 25.29 and 22.21, and the average age of all students was 23.76.

The social security feeling of married students was 75.87, while for single students it was 61.51. So it is so obvious that the married students feel much more security. Comparing the age and sense of security, it can be claimed that increasing age leads to increasing sense of security. The social security feeling of the students of lower, middle, and higher classes were respectively 50.00, 66.88, and 67.53 percent. Thus, with the increasing economic level the sense of security among the students is also enhanced. The sense of social security among the employed students is reported as 64.87 percent. Therefore, the employment factor also increases the social security feeling among the female university students. The statistic results gathered from the study, whether the students are single or married, showing 67.80 percent indicates that the gender did not make the social security feeling of the students to drop below 50 percent.

Table 1 : Pearson correlation coefficients between students' sense of security and the other variables .( influential factors )

Confidence Level	Correlation coefficient	Measurement deviation	average	Independent variables	Dependent variables
.0.030	0.259	0.858	3.77	Consent of the appearance	Social security of Female university students
0.240	0.143	2.22	8.06	Use of mass media	
0.005	0.329	0.996	4.40	Family support	
0.054	-0.235	2.11	5.87	Others ' treatment	
0.019	0.282	2.22	10.87	Religious commitment	
0.005	0.330	1.39	3.30	Trust in police	
0.001	0.428	1.19	3.70	The presence of the police	
0.021	0.451	1.02	3.52	Student employment	
0.742	0.041	1.21	3.14	Single or married situation of the student (gender)	

Based on the results gained from table 1 and using the correlation coefficient between the independent variables and the variable of social security feeling among female university students, it can be stated: There is a direct correlation with the amount of 0.259 between the social security feeling of female university students and consent of appearance. This amount which is 95 percent of confidence level is significant. An inverse correlation with the amount of 0.143 exists between the social security feeling of female university students with using mass media, which is not significant. Between the social security feeling of female university students and family support, there is a direct connection with the amount of 0.329. This amount showing 99 percent of the confidence level is highly significant.

An inverse correlation with the amount of 0.235 exists between the social security feeling of female university students with others' treatment, which is not significant. Between the social security feeling of female university students and religious commitment, there is a direct correlation with the amount of 0.282. This amount showing 99 percent of the confidence level is highly significant. There is a direct correlation with the amount of 0.330 between the social security feeling of female university students and trust in police. This amount which is 99 percent of confidence level is significant. Between the social security feeling of female university students and the presence of police, there is a direct connection with the amount of 0.438. This amount showing 99 percent of the confidence level is highly significant. Between the social security feeling of female university students and the employment of the students, there is a direct connection with the amount of 0.451. This amount showing 98 percent of the confidence level is highly significant. There is a direct correlation with the amount of 0.040 between the social security feeling of female university students and the sex factor, which is not significant.

Table 2: The test of average variable differences of the security feeling of the students according to employment status

Confidence level	T meghdad	Standard deviation	Average	number	The variable of employment status
0/398	0/850	23.28	69.76	41	Without Employment
		24.79	64.87	30	With emplotment

According to the information of the test T in table 2, the average social security feeling of the non employment students is more than the employment students. With the respect to the test T, this difference is not significant. Hence, it cannot be concluded that the employment factor is influential on the social security feeling of female university students.

Table 3: The average variable differences of the security feeling of the students with the regard to marital status

Confidence level	T meghdad	Standard deviation	average	number	The variable of Marital
0.012	2.865	16.76	75.87	31	Married
		27.03	61.51	39	Single

Based on the information of the test T in table 3 , the average social security feeling of the married students is more than the single students. With respect to the test T, this amount showing 99 percent is significant. Hence, it can be concluded that the marriage factor is a highly effective element on the social security feeling of female university students.

**Table 4 :** The average variable differences of the security feeling of the students the economic situation

Confidence level	Power of the test	Average of squares	Degree of freedom	Total Squares	average	number	The variable of economic situation
0.534	0.616	.360.88	2	720.77	50	1	Low class
		584.64	65	/16 38002	66/88	59	Middle class
			67	/94 38722	74/50	8	Higher class

Based on the information of the test F in table 4 , the more the economic situation increases ,the more the social security feeling raises . This difference with regarding to



the test F is not significant . Therefore ,it cannot be concluded that the factor of economic situation affects the social security of female university students.

**Table 5 :** The output of regression equation for clarifying the variance of social security feeling of the female university students

R <sup>2</sup>	Level of significance	T	Beta	B	variables	Ranking of the variables
0/11	0/216	1/313	0/614	10/12	Trust in police	1
0/08	0/066	2/040	0/581	6/72	Religious commitment	2
0/11	0/079	1/937	0/559	12/85	Family support	3
0/20	0/897	0/132	0/038	0/87	Employment situation	4
0/02	0/849	-0/195	-0/037	-2/67	Economic situation	5
0/02	0/855	-0/187	-0/054	-0/62	Use of mass media	6
0/07	0/759	-0/315	-0/078	-2/03	Consent of appearance	7
0/09	0/548	-0/620	-0/155	-7/98	Marriage situation	8
0/19	0/649	-0/467	-0/230	-4/85	Presence of police	9
0/06	0/123	-1/670	-0/357	-4/07	Others' treatment	10
0/00	0/080	-1/925	-0/468	-10/95	Gender factor	11

In this study ,the multiple regression and the method of Enter was used. Based on the data gathered from regression analysis of table 5 , the trust in police with the Beta of 0.416 holds the first important role in the security feeling of students. The second and third effective factors in social security feeling of female university students are respectively religious commitment with the amount 0.581, and family support with the amount of 0.559. Of course, none of these variables were not significant in the regression model. .

**Table (6)** The Values of R and R2 calculated from the regression model

The level amount of R	The amount of R2	The amount of R
0/425	0/712	0/884

In general , based on the value of correlation coefficient of R and the coefficient changes of R2,collected from table 6 , it can be stated that the eleven variables entering the regression model are responsible for explaining the 71 percent of the variables.

## 7.Discussion and Conclusion

Regarding the peace and security Montesquieu states : It is believed that security is the result of peace and peace in itself is the first fundamental law of nature .So, security is the foundation for establishing a government .The purpose of security is intended both for surviving of the life and providing the freedom (Tavassoli 1377 ) . The significant thing is that the concept of security has evolved gradually with the

development of human civilization, based on the same notion, modern concept of security is not just equivalent with threatening the borders, rather than it also covers new dimensions. Modern meaning of security is traced back to the social development and progress, not to military provisions and supplies. To include the security into the field of army requires its prerequisite facilities as having soldiers, guns, missiles, etc. When the social security and society are proposed, human being as an inevitable factor is included. Human beings together form a society which is erected on laws and orders, and to follow these rules is one of the basic requirements of people's mental security (Tavassoli, 1370). The purpose of this study, conducted according to case study, was to survey the factors affecting the social security of female Azad university students. In completion of the questionnaire 73 students collaborated with the researcher. In theoretical section of the study the ideas of Copenhagen school was used. In this study security, in a fairly comprehensive mood, was defined as follows: Security means lack of fear, fear that the human virtues are being attacked, It is equivalent to absence of dreads which are against the freedom and legitimate rights of human beings. Based on the conceptual model of the investigation all the individual variables were examined. In this study eleven independent variables as the factors affecting the security feeling of the female Azad university students, which is a dependent factor, were analyzed. According to the statistic analysis of the deductions of the study the following information of correlation between the items was reported.

The sense of security and satisfaction of physical appearance  $r = 0.259$ , the social security feeling and use of mass media  $r = 0.143$ , sense of security and family support  $r = 0.329$ , sense of security and others' treatment  $r = 0.235$ , security feeling and religious commitment  $r = 0.282$ , sense of security and trust in police  $r = 0.330$ , sense of security and the presence of police  $r = 0.329$ , security feeling and employment  $r = 0.451$ , sense of security and sex factor  $r = 0.040$ . There was no significant difference between the employment of the students and security feeling of the students.  $T = 0.850$ ,  $\text{sig} = 0.398$ . The noteworthy point of this finding is that the average security feeling of non employment students (69.76) is slightly more than the employment students (64.87). Between the marriage situation and security feeling there was a total significance amount of 99 percent.  $T = 2.856$ ,  $\text{sig} = 0.012$ . (This amount is in accordance with Jahangiri's findings). Between the economic status and security feeling there was no significant relationship.  $F = 0.616$ ,  $\text{sig} = 0.534$ . (This amount is not in accordance with Jahangiri's findings). Based on Jahangiri's findings the security feeling of middle class was higher than the two other classes. Based on the results of multiple regression trust in police had the highest role in providing the security feeling. This amount was in contradiction with Jahangiri's findings because based on his deductions family support had the most important role in keeping the security feeling. The regression equation also proved that eleven variables entered in the equation are able to explain 71% of the variables affecting the sense of security.

The consequences of this investigation proved that surveying the influential factors on the security feeling of the female university students is highly important. Iran's post Islamic revolutionary society is experiencing new changes of social factors. Unfortunately, there were no pre-Islamic revolutionary investigations or investigations belonging to the first decades of Islamic revolutions to be compared to the existing research. For instance, considering the religious commitment factor, which is considered as the second element in providing the security feeling among the female university students (in accordance with the findings of Noorozi and Foladi Sepher, 1388), how was the condition of female students before Islamic revolution? According to Jahangiri's findings the religious commitment had the sixth ranking in providing the security feeling. In an Islamic society, values and religious beliefs can have significant impacts on people's behavior and emotions. Thus, identifying and promoting the right



values and religious beliefs can be highly effective in creating a sense of security among the female students. Trust in police as one of the most important factors in creating security feeling is noticeable. In the present study this factor achieved the first ranking while in Jahangiri's research it had the latest ranking. Therefore, when the students, who participate in social affairs, confront with social threats and dangers, trust in police is regarded as the best protector of their safety (in accordance with the findings of Sahabi and colleagues, 1388). However, there are still serious opportunities for investigation to analyze the impact of various factors on the social security feeling of female university students. It is hoped that in future a closer scrutiny of such study will be possible.

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# Impact of Water supply on Social life A case study of Cholistan Desert, Pakistan

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## **ABSTRACT**

The study has been carried out to measure the impacts of water supply on social life at Cholistan area, using primary data by survey and employing average. This study reviews the government spending on water supply to the people of Cholistan. The study examines the social welfare in Cholistan at what extent it increased in relation to government investment in water supply scheme. The study is also reveals that some people are still depriving of water facility. Overall, there is CDA, PCRWR in Cholistan after the project. The people have better water supply facilities.

**Keywords:** Social life, Desert, Water born diseases, Water Supply

## **1. Introduction**

Pakistan is the sixth biggest country in the world by population. According to economic survey (2010-2013); it has a population of 176.7 million. According to the population Reference Bureau 2006 by 2025, it would rise to 228.8 million. With the current rate of population growth, the population of Pakistan is likely to double in next 39 years. This increase in population will have direct impact on water sector for meeting domestic, industrial and agricultural needs. Pakistan is on the edging of becoming water deficit country. Of the total annual water resources available to Pakistan 6 percent is used by domestic and industrial sector. Water supply and cleanliness is deserted sector in Pakistan. The government spending in WASTAN (water and sanitation) sector is lowly as compared to other social sectors spending. According to Economic Survey 2004-2005 1.1 billion people lack right of entry to improved water sources. Insufficient water supply destroyed human life. It loses their effectiveness to work and they are distress from various water born disease. This sector needs improvement in Pakistan. According to economics Survey 2008-09, 65 million population of Pakistan out of total 163.76 million is poor of clean drinking water. According to economicsurvey (2010-2011) in Pakistan people are still suffering from various healths lacking like narrow right of entry to health facilities. The most instant health problems of Pakistan are insufficient hygiene, dangerous water, and poverty and low literacy rate. Pakistan requires progress in economic and policy sector to reduce the number of diseases. In 2007 infant mortality rate was 73% and mortality under 5 was 90%.

Piped water supply to household can minimize health risks because it improves the quality of drinking water. Diseases associated with poor water have great impact on health significance. During the 1980s and 1990s there were significant improvements in water supply projects in developing countries. In 2004 still a significant proportion of the world's population remained without access to an improved water supply.

### 1.1 Terms of References:

Chak No 1 DNB (Dera nawab branch), 121 DNB, 131 DNB are situated in Cholistan. Now the villages consist many houses. The villages are surrounded by desert. Most of people are agriculturist and some are poor labor and some are in other fields .villages are not located in plan are. Before the project of (CDA & PCRWR) Morbidity and Mortality rates due to water born diseases like cholera, malaria and diarrhea were very high which was due to unsafe drinking water. Moreover proper health facilities were not provided to their villages.

### 1.2 Cholistan:

Cholistan is one of major desert covering an area of about 2.6 million hector, constituting the southern part of Bahawalpur Division. It is located between latitudes 27°42 and 29° North and longitudes 60°57 east. The length of desert is about 480km and breadth is from 32 to 192 km. Cholistan is the part of Great Indian Desert and one of the larger desert of Pakistan. The total area of Cholistan desert is 10,399 square mile (2,693,328hc).Geographically, the Cholistan comprises two natural regions: (1) Great cholistan that comprise an area of 13,630 Km and (2) Lesser Cholistan consisting of 12,370 Km area. Greater cholistan lies to the Southwest of the most recent course of defunct Hakara River and extend to the border of India (Akhter and Arshad, 2006). Lesser Cholistan extend north east from Hakara River to the end along the bank of Sutluj River. This part of Cholistan is arid apart from the presence of intersecting perennial water of Sutluj and Beas rivers. Low laying sand dune, mostly smaller than those found in Greater Cholistan (i.e. less than hundered meters) and extensive flats of exposed alluvial clays (dahar) are present here. In its original form, Lesser Cholistan would have been used as an extension of the grazing land for the Greater Cholistan. However, the extensive low lying flat lands and proximity of perennial water in this part lends itself to the development of irrigation. Thus, from the turn of this century an intensive irrigation system based on canals was constructed along the north fringes of Lesser Cholistan.

### 1.3 Hypothesis

Water supply contributes to social welfare of people in the area.

- a)  $H_0$ : There is no association between water supply and expenditure on health.  
 $H_i$ : There is association between water supply and expenditure on health.
- b)  $H_0$ : There is no association between water supply and time of spent on fetching water.  
 $H_i$ : There is association between water supply and time of spent on fetching water.
- c)  $H_0$ : There is no association between water supply and monthly income.  
 $H_i$ : There is association between water supply and monthly income.
- d)  $H_0$ : There is no association between water supply and fetching water for household.
- e)  $H_0$ : There is no association between water supply and fetching water for household.  
 $H_i$ : There is association between water supply and fetching water for household.
- f)  $H_0$ : There is no association between water supply and water born diseases.  
 $H_i$ : There is association between water supply and water born diseases.
- g)  $H_0$ : There is no association between water supply and productivity of women.

### **1.4 Objectives**

- To study the area where water facilities were provided 4 years ago.
- To find the difference in the socioeconomic conditions of the people
- Who have been provided with this facility and those who have not been provided with this facility?

## **2. Literature Review**

Their research was an attempt to access the access of drinking water by the year 2015. Study used the Pakistan Social Living Standard Measures (PIHS) 2001-02 survey results to evaluate change in access to safe drinking water. This included documents and reports from WHO, UNICEF, ADP, World Bank, UNDP, and CRPRID, Ministry of environment PCRWR and other relevant government and non government institution. The study found direct relationship between water, sanitation, health, nutrition, natural environment and human well being. They also examined that the increase in population will have direct impact on water sector for meeting the domestic, industrial and agricultural needs. The main objective of their study was to focus upon sources of water quality. Data was taken from the journal of water and health. According to them, public health was depending upon quality of water, vessels used for fetching water, water implication policy and hygienic program. Regression model was applied to measure relationship of cholera and diarrhea with quality of water. In developing countries, people fetch water from wells and rivers which generated water born diseases. The cholera had significant relationship with point-of-use water. Water quality in developing countries was needed to improve. The objective of their study was to examine the awareness for drinking water among household in Hyderabad. The data was taken from “Pakistan Institute of Development Economics”. The data sources were government and non-governmental organizations NGO’s and private drinking water companies. For separate effects of different purification methods, bivariate and multinomial models were applied. The study found that quality of drinking water in Hyderabad was very poor at household level.

Most water supply system in Pakistan and other developing countries are not working according to design. Their study was done to examine the effect of chlorination on water supply in a village in Pakistan. The intervention took place in villages A and B of Punjab (PAK). They examined after chlorinating, water in village A improved and was less faceably polluted then in village B. in a recent large multi-country review, the same authors concluded that health benefits from improved water quality occurred only in household where optimal quantity of water was present. They also examined water management practices at all the investigated points. 180 water samples were collected from 6 villages. They investigated that 80% of all illnesses are linked to poor microbiological quality of water. Their study was conducted in Lungwena, coastal area in southern part of Malawi. Their study was done in order to assess the microbiological quality of domestic water and to investigate water management practices. The area had 26 villages but data was collected from 6 villages based in their geographical location due to random sampling. Their study has demonstrated that water used for both drinking and cooking in Lungwena is of poor quality and the contamination is possibly due to poor management of water. The results showed that there was feacal contaminating of stored household water from both protected and unprotected water sources. In Lungwena community, implementation of interventions requires a careful Consideration of local culture.

## **3. METHODOLOGY**

### **3.1 The process of field research**

The research has been undertakes to examine the impacts of water supply on social life (living standard



of people) in their villages 1 DNB (Dera Nawab Branch), 121 DNB, 131 DNB, 111 DNB, 111 DNB, 126 DNB. For this purpose, primary data has been used. A sample of 100 people who availed this facility has been investigated through a questionnaire. Furthermore it also has been investigated why some of people in the village have not availed this facility.

### 3.2 Method of data collection

For an in depth study to see the impact of water supply on social life in cholistan rural Punjab. We use the questionnaire methods to get the proper information. Data has been collected with the help of questionnaire schedule. The data was collected with one week. Data for both dependent and independent variables have been taken from 1 DNB (Dera Nawab Branch), 121 DNB, 131 DNB, 111 DNB, cholistan Tehsil Yazman District bahawalpure of Punjab.

### 3.3 Function

$EOH = f(WS)$

$TSFW = f(WS)$

$Y = f(WS)$

$FWOH = f(WS)$

$POW = f(WS)$

$WBD = f(WS)$

### 3.4 Model

To estimate the impact of water supply on social life. We have to regress all those variables through Chi-Square test because the data are attributing and all the results are getting by percentage. The chi-square test for independence, also called Pearson's chi-square test or the chi-square test of association, is used to discover if there is a relationship between two categorical variables,

- o **Assumption #1:** Your two variables should be measured at an ordinal or nominal level (i.e., categorical data).
- o **Assumption #2:** Your two variables should consist of two or more categorical, independent groups. Example independent variables that meet this criterion include gender (Males and Females), time spent in fetching water (0-2, 2-3, 3-4 hours), fetching water for household (Men, Women, Children) and so forth.

### 3.5 Dependent and Independent Variables

An independent variable, sometimes called an experimental or predictor variable, is a variable that is being manipulated in an experiment in order to observe the effect on a dependent variable, sometimes called an outcome variable.

## 4. Results and Discussions

### 4.1 Monthly Income before Project

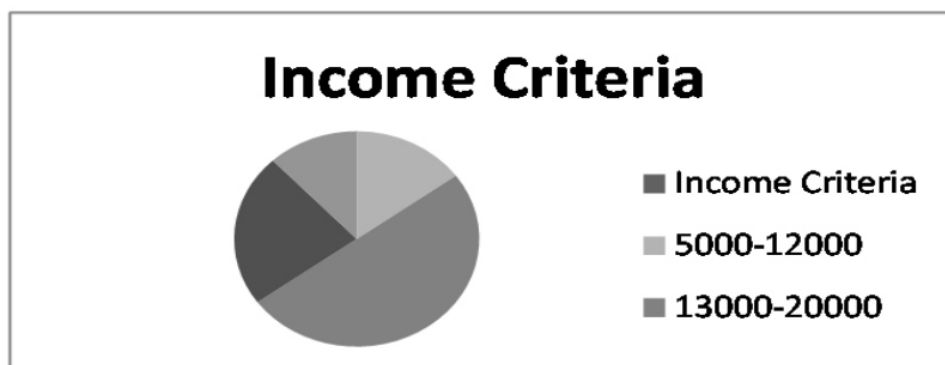
The study has investigated about the monthly income of people earning in different sectors. Study has shown that before project their income was low because only men were participating but also few women were generating for their household members.

The graph shows that people's monthly income is low before project 15% people were earning between 5000-12000 . 50% people were earning between 13000-20000 23% people were earning between 21000-27000 12% people were earning between 28000-34000.



**Table No.1** Monthly income before project

Income Criteria	Individuals	Percentages
5000-12000	15	15%
13000-20000	50	50%
21000-27000	23	23%
28000-34000	12	12%

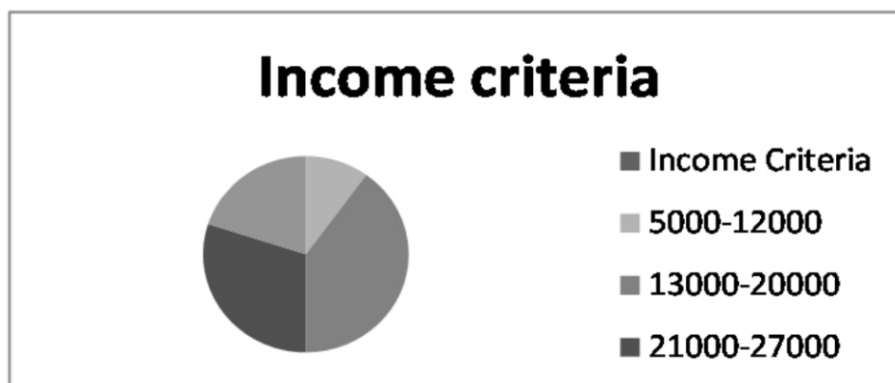


#### 4.2 Monthly income after project

The study has investigated that monthly income of people has increased due to better facilities from CDA & PCRWR. No more women started to take part in income generating activities because of spare time. They helped men. The graph is showing an increase in income of people after project 10% people are earning between 5000-12000 40% people are earning between 13000-20000 .30% people are earning between 21000-27000 and 20% people are earning between 2800-34000.

**Table No.2** Monthly income after project

Income Criteria	Individuals	Percentages
5000-12000	10	10%
13000-20000	40	40%
21000-27000	30	30%
28000-34000	20	20%

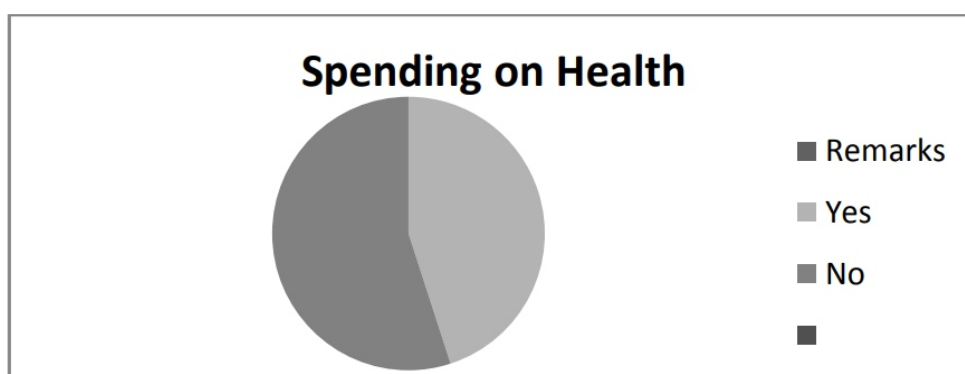


### 4.3 Spending On Health before Project

The study has investigated the expenditure on health before project. The study has shown that more people spent on health before project because they were suffering from different type of diseases due to inadequate water supply. The graph shown that 45% people spending on health and 55% people were not spending before project .Mostly children were suffering from water borne disease like malaria, typhoid, cholera and stomach problems.

**Table No.3** Spending on Health before Project

Remarks	Total Numbers	Percentages
Yes	45	45%
No	55	55%

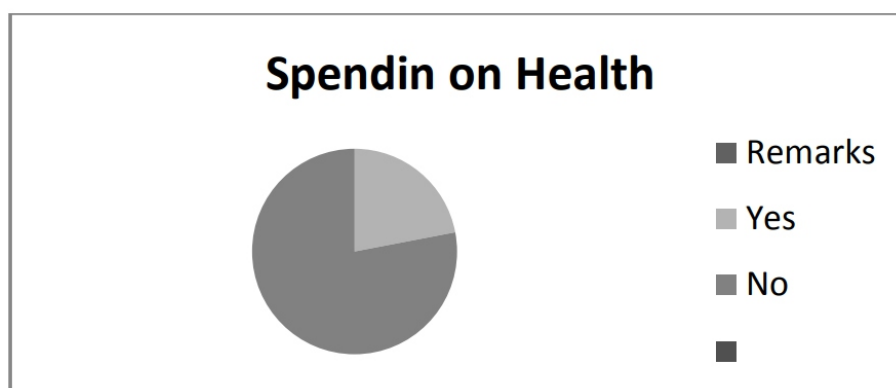


### 4.4 Spending on Health after Project

The study has investigated that expenditure on health has reduced because of water facilities. This project has controlled many water borne diseases in the area. The graph shows that only 22% people spent on health while 78% people were not spending after project .Better health has reduced expenditures on health.

**Table No.4** Spending on Health after Project

Remarks	Total Number	Percentages
Yes	22	22%
No	78	78%

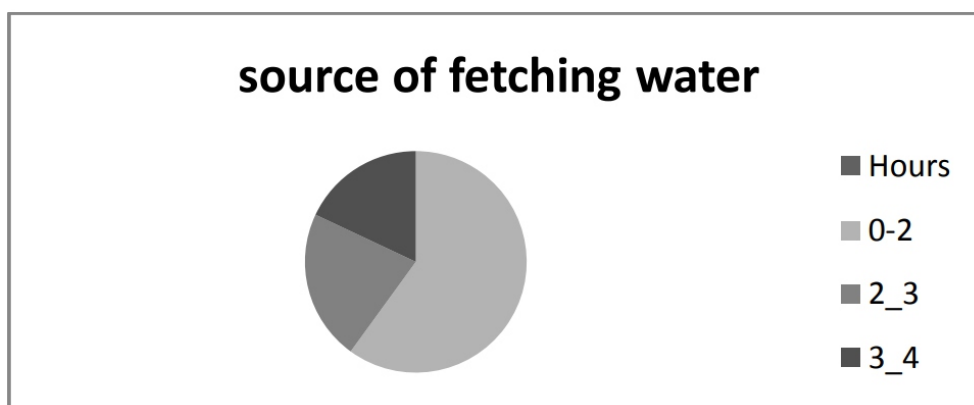


#### 4.5 Source of Fetching Water

The study has investigated that the fetching water was difficult task Women and children were mostly involved in this task because men were engaged in income generating activities .The graph is showing that before project 60% people used to spend 0-2 hours in fetching water. 22% people used to spend 2-3 hour and 18% people used to spend 3-4 hour in fetching water. The time for fetching water is long because people used to bring water from canals out of the village.

**Table No.5** Source of fetching water

Hours	Individuals	Percentages
o-2	60	60%
2-3	22	22%
3-4	18	18%

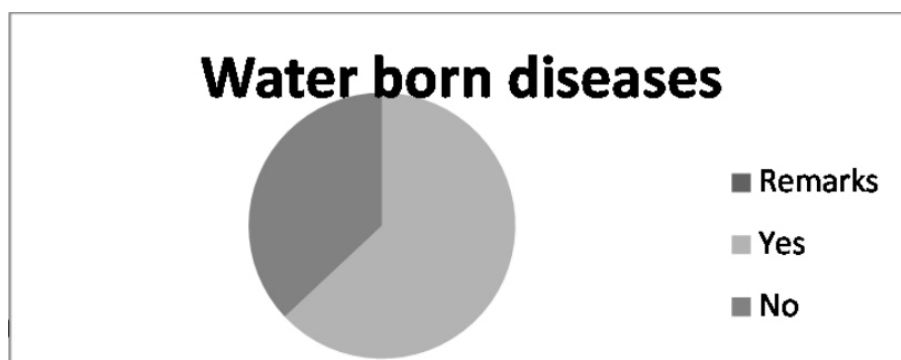


#### 4.6 Water Born Diseases Before project

The study has investigated that before project water born diseases were very high because water was not clean and diseases like cholera, typhoid etc was in excess .Mostly children were suffering from these diseases. The graph shows that 63% people were suffering from these diseases while 37% were free from these diseases.

**Table No.6** Water Born Diseases before Project

Remarks	Total Number	Percentages
Yes	63	63%
No	37	37%



#### 4.7 Water Born Diseases after Project

The study has investigated that water born diseases have been reduced after project. Now drinking water is pure and clean which makes environment better. The graph is showing that 97% people were agree that water born diseases have been reduced but only 3% people are disagreed.

**Table No.7** Diseases after Project Water Born

Remarks	Total Numbers	Percentages
Yes	3	3%
No	97	97%

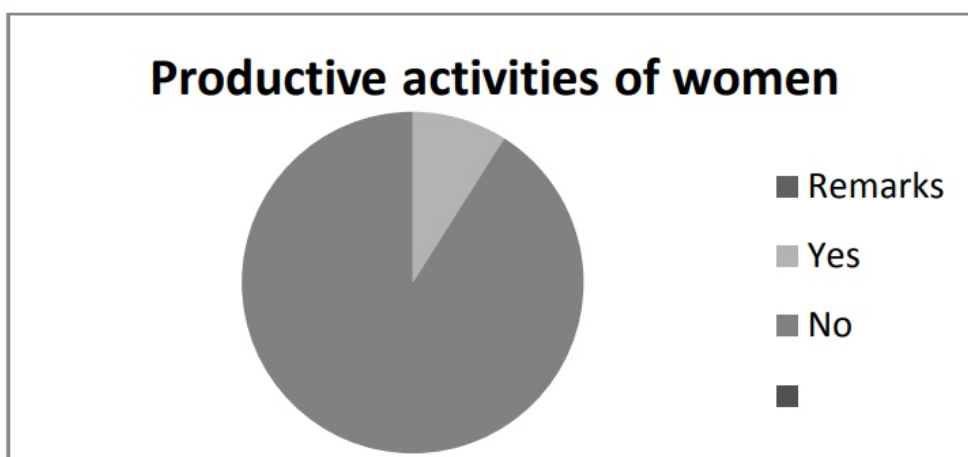


#### 4.8 Productive Activities of Women before Project

The study has investigated the productive activities of women. Before project women were not able to participate in any type of productive activities because most of their time was wasted in fetching of water. Even they cannot properly pay attention to their children. The graph is showing that only 9% women were taking part in income generating activities while 91% women were not taking part in such type of activities.

**Table No.8** Productive Activities of Women before Project

Remarks	Total Number	Percentages
Yes	9	9%
No	91	91%

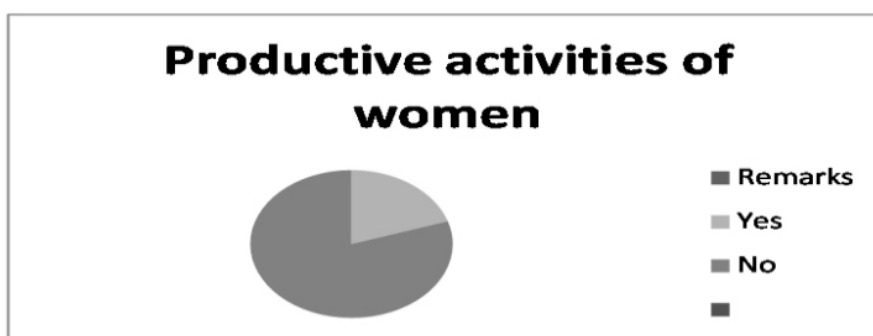


#### 4.9 Productive Activities of Women after Project

The study has investigated that productive activities of women has increased to some extent after project because of saving time. Now women started to take part in income generating activities .They started to pay attention to their family and other domestic work .Their health improved .But still majorities of women do not work because some people do not like their women to take part in such activities and some women do not have awareness about time saving. The graph is showing that after project 20% women started to take part in income generating activities and 80% are still not taking part.

**Table No.9** Productive activities of Women after Project

Remarks	Total Number	Percentages
Yes	20	20%
No	80	80%

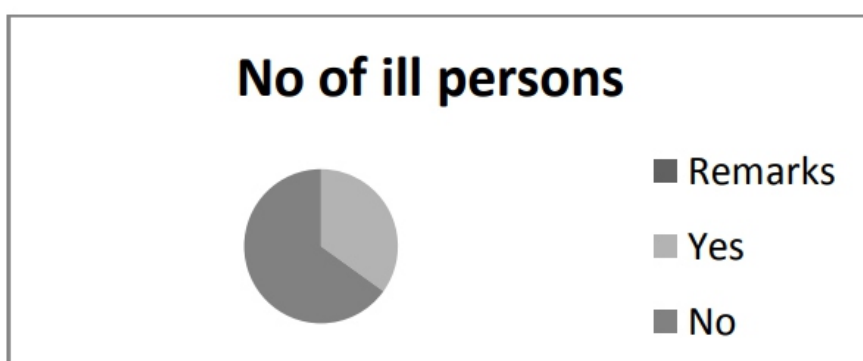


#### 4.10 No of Ill People before Project

The study has investigated about the number of ill persons before project .Before project there were many people suffering from diseases .Mostly children were suffering from these diseases. The graph shows that 31% people were ill before project while free from diseases.

**Table No.10** No of Ill Person before Project

Remarks	Total Number	Percentages
Yes	31	31%
No	69	69%

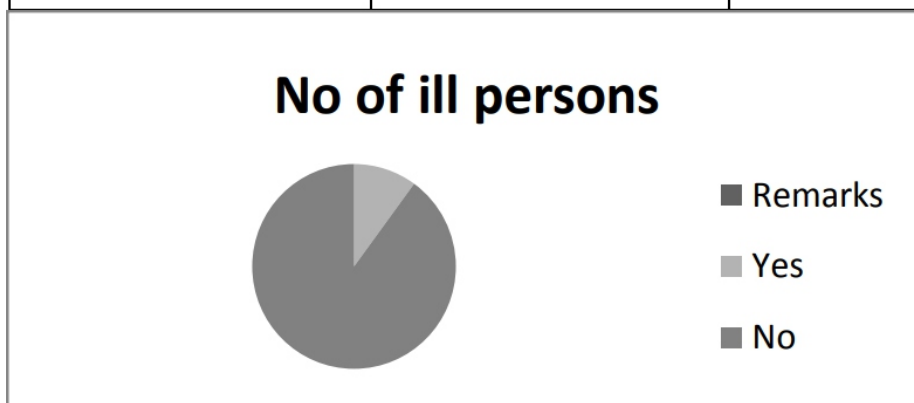


#### 4.11 No of Ill persons after Project

The study has investigated about the no of ill person after project .It has shown that this project proved to be helpful in reducing diseases. After project the no of ill persons reduced and people feel better. The graph shows that 10% people are still ill while 90% people are healthy and are busy in their field.

**Table No.11** No of Ill persons after Project

Remarks	Total Numbers	Percentages
Yes	10	10%
No	90	90%



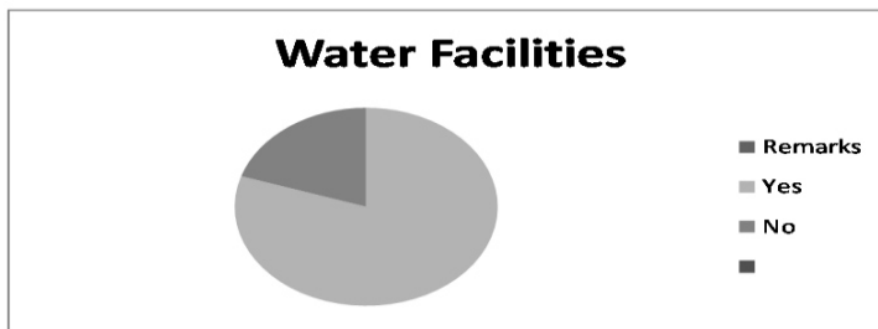


#### 4.12 Water Facilities

The study has investigated about water facility for people say that there are water facilities because water is at their door step .This facility has reduced their physical hardships There are also some people who still do not use this water. There are many reasons for it some people say that water of this project is not clean and good for health it is mixed with sewerage water system. They say that it causes diseases. Some people are so poor that they cannot pay for this water .The cost of the water was 60 rupees in the starts then it rise to 80 and now it is 110 rupees per month. People at the end of village also do not use the water they say that we do not have the access to safe drinking water because the home in the start of village get water but when it reaches at the end, its pressure becomes low. The graph shows that there are 20% people who are still not using this water and 80% people are availing this opportunity.

**Table No.12 Water Facilities**

Remarks	Total Number	Percentages
Yes	80	80%
No	20	20%



**Table No.13**

#### **CHI-SQUARE TEST:**

		<u>values</u>	<u>df</u>	<u>Asymp. Sig.</u>
<b>Expenditure on health</b>	Pearson Chi-Square	20.455(b)	1	.000
	Likelihood Ratio	18.245	1	.000
	Fisher's Exact Test	27.977	1	.000
	Linear-by-Linear Association	20.250	1	.000
	N of Valid Cases	100		
<b>Monthly income</b>	Pearson Chi-Square	67.391(a)	3	.000
	Likelihood Ratio	70.360	3	.000
	Linear-by-Linear Association	53.525	1	.000
	N of Valid Cases	100		
<b>Time spent in fetching water</b>	Pearson Chi-Square	88.636(a)	2	.000
	Likelihood Ratio	86.676	2	.000
	Linear-by-Linear Association	71.445	1	.000
	N of Valid Cases	100		
<b>Fetching water for household</b>	Pearson Chi-Square	100.000(a)	2	.000
	Likelihood Ratio	100.080	2	.000
	Linear-by-Linear Association	63.643	1	.000
	N of Valid Cases	100		
<b>Water born diseases</b>	Pearson Chi-Square	42.568(b)	1	.000
	Continuity Correction(a)	39.256	1	.000
	Likelihood Ratio	49.091	1	.000
	Linear-by-Linear Association	42.142	1	.000
	N of Valid Cases	100		

<b>Productivity of women</b>	Pearson Chi-Square	2.473(b)	1	.116
	Continuity Correction(a)	1.290	1	.256
	Likelihood Ratio	4.234	1	.040
	Linear-by-Linear Association	2.448	1	.118
	N of Valid Cases	100		

### **Interpretation:**

**Expenditure on health:** In this table we are given the Chi-Square obtained the degree of freedom [df = (2-1) (2-1) = 1] which is significant at least at the level of 0.01 alpha level. In this table we can see here that Chi-Square = 20.455<sup>b</sup> and P = 0.000 and P is less than alpha error term 0.05, the probability of the Chi-Square test statistic was P < 0.05. The hypothesis that differences in lack of water facility are related to difference in expenditure on health is supported by this analysis. We can see the strength of association between the variable is moderate (.412) 0.000

**Month income:** In this table we are given the Chi-Square obtained the degree of freedom [df = (2-1) (2-1) = 1] which is significant at least at the level of 0.01 alpha level. In this table we can see here that Chi-Square = 67.391<sup>a</sup> and P = 0.000 and P is less than alpha error term 0.05, the probability of the Chi-Square test statistic was P < 0.05. The hypothesis that differences in lack of water facility are related to difference in expenditure on health is supported by this analysis. We can see the strength of association between the variable is moderate (.635) 0.000.

**Time spent in fetching water:** In the Chi-Square test, we are given an almost overwhelming number of statistics to interpret. For simplicity's sake we will only concern ourselves with the first row of statistics labeled Pearson Chi-Square, in this row we are given the Chi-Square obtained, the degree of freedom [df = (R-1)(C-1)] and the exact level of significant. In this case, we have a Chi-Square of 88.636<sup>a</sup> with a degree of freedom [df = (2-1) (2-1) = 1] which is significant at least at the level 0.000. We can see the strength of association between the variable is moderate (.685) 0.000

**Fetching water for household:** In this table we are given the Chi-Square obtained the degree of freedom [df = (2-1) (2-1) = 1] which is significant at least at the level of 0.01 alpha level. In this table we can see here that Chi-Square = 100.000<sup>a</sup> and P = 0.000 and P is less than alpha error term 0.05, the probability of the Chi-Square test statistic was P < 0.05. The hypothesis that differences in lack of water facility are related to difference in expenditure on health is supported by this analysis. We can see the strength of association between the variable is moderate (.135) 0.000

**Water born diseases:** In the Chi-Square test, we are given an almost overwhelming number of statistics to interpret. For simplicity's sake we will only concern ourselves with the first row of statistics labeled Pearson Chi-Square, in this row we are given the Chi-Square obtained, the degree of freedom [df = (R-1)(C-1)] and the exact level of significant. In this case, we have a Chi-Square of 42.568<sup>a</sup> with a degree of freedom [df = (2-1) (2-1) = 1] which is significant at least at the level 0.000. We can see the strength of association between the variable is moderate (.124) 0.000

### **Interpretation for crosstab:**

**Table No.14**

		expenditure on health	
		yes	no
social welfare(water facility)	yes	45%	35%
	no	0	20%
Total		45%	55%

It has been inferred from the field data that first category, 45% responders have agreed that expenditure on health within lack of water supply. And 55% responders have not agreed that lack of water facility depend on expenditure health? The relationship between water supply and expenditure is negative. Where these groups make the significant association among water supply and expenditure on health. This mean our hypothesis (Hi) is accepted as their capability the lack of water facility. We reject null hypothesis between water supply and expenditure on health.

**Table No.15****Monthly income**

		monthly income			
		5000-12000	13000-20000	21000-27000	28000-34000
social welfare(water facility)	yes	15%	50%	15%	0%
	no	0%	0%	8%	12%
Total		15%	50%	23%	12%

The table of crosstab which shows, it has been inferred from the field data that (5000-12000) income responders have agreed that the lack of water facility cause to decrease the monthly income 15% reduce. Therefore (13000-20000) 50% responders have agreed that within lack of water supply cause reduce their income. And (21000-27000) 23% responders do expensive within lack of water supply on monthly income. (28000-34000) 12% responders have agreed that just 12% expensive in monthly income. The Chi-Square test results show significant, this mean our developed hypothesis (Hi) is accepted and we reject null hypothesis association between water supply and monthly.

**Table No.16****Time of spent in fetching water**

		time of spent in fetching water		
		0-2	2-3	3-4
social welfare(water facility)	Yes	60%	20%	0%
	No	0	2%	18%
Total		60%	22%	18%

In this table, time of spent in fetching water 0-2 hours 60% within the lack of water facility responders have agreed that 2 hour waste their time in fetching water and 2-3 hours time spent in fetching water, 22% responders have agreed that three hours waste their time in fetching water. Therefore 3-4 hours 18% responders have agreed that lack of water facility to fetching the water in this area.

**Table No.17****Fetch water for household**

		fetch water for household		
		men	women	children
social welfare(water facility)	Yes	40%	40%	0%
	No	0%	0%	20%
Total		40%	40%	20%

Lack of water facility in fetching water for household, it has been agreed that there are three categories men, women, children. In crosstab 40% male responders have agreed to fetching water for household. And 40% also female responders to fetching water for household and 20% children to fetching water for household in this area. The crosstab table shows that within lack of water facility male, female, and children participate to fetching water.

## **5. Conclusion and Recommendations**

### **5.1 Conclusion**

The study reveals that this project has positive impacts on social welfare of people. And the study has found out the determinant of the impact of water supply on social life in Cholistan with the help of Chi-Square test, results have been obtain. Average and percentage has also been calculated. The dependant variable is social welfare which is the function of water facility and independent variables are expenditure on health, monthly income, time of spent in fetching water, fetch water for household, water born diseases, and productivity of women. It has significantly reduced the water born diseases, as a result no of ill persons has decreased. The money they used to spend on health now they can spend on other activities. Income, the project also contributed to productive activities of women by saving their time. But there is a small impact on educational opportunities because it is a long run process and needs more time. The independent variable has positively affected the social welfare. Hence, we can conclude that the improved water supply significantly improved the living slandered of the people.

### **5.2 Recommendations**

- a) Although government has provided water facilities but there is need of more investment in this sector because government does not spend sufficiently in these services so there is need of greater investment.
- b) According to our findings the project has enhanced the productive activities of women but still majority of women are not in work and they have no awareness about time allocated. There is need to give awareness to the people by media for the purpose.
- c) The project has relatively small effect on literacy. It is a long run process government should take some active measures to inform people about the importance of education.
- d) The project has reduced water born diseases and no of ill persons. Their health has improved but still government should help the people to make environment better for the welfare of economy.
- e) The government spending in this sector is low as compared to its spending in other sectors; government should enhance it is that people get better opportunities of life.
- f) Most of villages in Punjab have lack of water facilities that affects the health of people seriously and their productivity as well there is need of more investment and to launch new projects for the welfare of rural areas.
- g) The people of village should be in touch with the organization that provide these facilities and inform them about their problems relating to the project to gain more benefits and satisfaction from water supply scheme.
- h) The project has provided the water at their door step in rural locality. If the facility is provided to the whole rural areas then people should save their time and their health, education, employment and productive activities will improve. So government should take keen interest for the improvement of this sector for the progress of rural Punjab.
- i) Although government is providing these facilities to improve living stander of people, but its top priority should towards the health of public. It should provide basic health facilities for the welfare of society. It should use bottom to top up approach rather than top to bottom approach.
- j) Government spending in WATSAN (Water and Sanitation) sector is low as compared to other sectors.

It should spend more on these sectors to make society healthy and prosperous.

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# Factors Affecting Educational Administration at the University

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## **ABSTRACT**

Learners with different learning styles into lessons and teachers have different teaching methods to promote quality learning environments, the influence of these differences can be. Without a doubt, match the learning styles and teaching methods of teachers in providing quality education in all areas of the far-reaching effects. Finally, to improve the quality of learning environments, there are proposals. Some elements of educational management are mentioned in the passage.

**Keywords:** management, education, learner, teacher, university

## **1. Introduction**

From the perspective of great thinkers like Confucius, learning is at heart of all human activities. He notes that the human mind at birth is like a blank slate environment and experiences have great influence in forming it (Cooper, 2001). Thus, the environment, the education component of its important role in the lives of individuals. One of the measures that have a great impact on learning is a teaching method. Many speakers and experts in the field of education and pedagogy is always learning and teaching methods are listed together. Given the different perspectives of education has an important role in promoting quality learning environments. From the perspective of Socrates, effective teaching occurs when a person is in training to scientific independence (Zahorik, 1986). This requires that the teacher of rhetoric combined to surround him down and let (Williams, & Burden, 1997). To enhance learning environments need to change the worldview of people in the path of development. Plato also provides a learning environment as a platform for individuals to achieve favorable condition has learned society (Cooper, 2001). Plato refers to aspects of teacher education. If the knowledge is not used wisely, resulting in destruction and corruption also taught as a tool to educate individuals (Thornbury, 2001).

In this regard, Freire (1970) to distinguish between the two types of training. He has two models namely "banking model" and "problem solving model" that takes the name describes the nature of the relationship between teacher and student. The first type of training, inclusive bank is assumed to have abundant data accumulated by teachers without regard to the individual is allowed to own a bank account that the "data storage" will be removed. The banking model of education, embracing the passive role and interfaces unidirectional flow of information from teacher to student in the class moves (Grasha, 1996). The education system, encompassing right questions about the right and wrong no information and have not blindly accept everything. Theologian, teacher, and there is no dialogue. In this way, a person's sense of being and concludes that the environment is not a passive. According to Freire, only through "model solution" that would improve the educational system and society. The power of problem-solving model to one that is productive. It is obvious that teaching had a profound impact on the quality of the educational enterprise individuals (Honey, & Mumford, 2006).



From these data we can conclude that teaching always hang on learning and certainly the nature of this relationship has an important role in promoting quality learning environments. We can conclude that learning environments are influenced by many factors that can have a constructive role in learning or restrictive. Some of the measures that will lead to enhanced learning and by Kumaravadivelu (1994) have also been confirmed as follows:

- To provide learning opportunities
- create an interactive space for exchange students
- reduce tension between teachers and students by identifying the role of student
- boost exploration method in which a person is inclined to think
- Integration of skills in each
- motivate students to learn and gain independence
- Create Awareness

It should also be noted that theories of teaching had an influence on the nature of learning. For example, the techniques of teaching LNP to assist teachers in the school to have a better relationship. In this method it is assumed that each individual has a particular attribute. Teachers must recognize the dominant feature and enter the universal mind and guide him (Huang, 1997). So, people have different ideas of reality and that teachers need to be familiar with these differences. Teachers should help students catch up to their new skin and in this way to reach new insights. Coordination between teacher and student makes her more motivated, more sensitive to the knowledge, increase self-esteem, reduce stress and increase positive role in the classroom is inclusive (Millrood, 2004). Teaching is not just a profession but art is also taken into account. Sometimes, a good teacher great expertise, but cannot transfer data to and learning occurs slowly. Without a doubt, the contrast teaching sciences like psychology and sociology, organizational learning has been faced with many challenges. To understand what skills need to be taught basic first look at the theories taught. It is certain that in the region where the teaching method of "cultural capital" and "social capital" (Johnson, 1996) is different from teaching in a region will be prohibited. Regardless of how teaching methods have been adopted to improve learning "learning ecology" must be considered as one of the world's (Rowe, 2001).

Zahorik (1986), Theories of teaching is divided into three main parts: (1) the scientific research, scientific-research teaching the concept of "empirical research" has an important role as Zahorik (1986) states, "The operation of the principles of teaching follow the authentic teaching methods and follow the teaching of high-quality teachers "are examples of the concept of scientific research.

The teaching model is valid, the logic and previous research identify appropriate teaching model and if the model could be useful in establishing the credibility of the changes is unknown. Thornbury (2001) in a study of a successful teaching methodology, twelve features effectively teach the way:

(1) pre-designed curriculum taught through guided, (2) high expectations for student learning, (3) the teaching process becomes attracted widespread attention, (4) methods of teaching clear and intentional; (5) the learning to be evaluated carefully; (6) If the notice is not inclusive teaching is repeated; (7) time spent learning the courses, (8) in each session, practice or specific activity that is effectively replicated (9) departments formed based on the class educational needs; (10) the high standards of behavior in the classroom (11) is positive personal relationship between teacher and learner; (12) for inclusive development through the use of incentives and rewards to those used as principals, teachers can teach

junior classes offer better.

2. The theoretical-philosophical concept: The group is divided into two subsets: (1) methods based on the theory that the 2 methods. Methods related to the theory, the foundation of many teaching techniques (Richards, 2002). In this theory, teaching methods is evaluated through logic and reasoning. In this experimental study, what is important is not the purpose of thinking is valued. Method depends on the model of teaching through the teacher's personal definition, pervasive, educational institutions and the role of education in society is determined (Richards, 2002). So, what is society's system of values is an effective teaching method.

3. Art-inspired concept: In another dimension, a teaching method based on individual skills and personality of the teacher is defined (Richards, 2002). What personal skills are important in this method the teacher uses in particular circumstances. Thus, there is no universal teaching method based on knowledge of the environment but also teacher gets his teaching methods and harmonious generation. What is evident in the decision-making powers and authority of the teacher is very important. Previous theories, the teacher was the case in the way that teachers can be aware of the theoreticians and tool needs to be diversity and creativity in their teaching methods.

## **2. Results**

"Activists" to participate fully and without bias in experience (Johnson, 1996). So, activist's receptive mind and experience new activities are an incentive. Activists people is that "anything is worth a try." For this group, it is important to challenge the mind and challenges for their implementation are boring. "Activists' ideas and experiences through a variety of perspectives to examine them to discover hidden aspects. It is important that the information gathered enough evidence to reach a conclusion. For these individuals, the conclusion, the last stage of thinking and only after reviewing the data collection and the result is multifaceted. Activist's slogan is being cautious. Therefore, in discussions and group work, activists desire to express their own and only after listening to the opinions of others and examine the information, express your ideas. 'Theorists' views and evidence in the form of various theories put. To overcome the problems, this group of logical methods is used. What is important, "analysis" and "synthesis" is. Logic and reason is their motto. Thus, subjectivity, uncertainty and judgments of sentiment theorists are not accepted. This group of people is looking for new theories to activists. Application-oriented practice is to believe that what is important.

"Evaluation" is integral and fundamental structures of teaching. Inappropriate evaluation solely on the basis of written test scores over time, rather than learning and understanding of science, the students referred to the serious injury. It is worth noting that the evaluation should not only written tests at the end of the course. "Oral Assessment" also helps during teacher training to "feedback" to students with immediate effect and this could be implemented to him both emotionally and in terms of cognitive. In other words, the education system should be the "formative evaluation" lead. Researchers mention that, teacher emeritus at Michigan State University, the formative evaluation as a promising approach in the modern educational system has learned. Black and William (1998) Coordination between the learner and educational goals, is immediate feedback and the ability to make changes in teaching methods from a formative evaluation of the most important features.

The students, "managing" the most important characteristic of effective teaching are listed. Appropriate teaching methods and skills alone cannot meet the needs of the people. Not encourage students to do research; students participate in the discussions, lack of familiarity with the methods and thinking of

student's motivation including injuries that plagued people. Lack of overall planning, monitoring compliance Overcrowding and lack of academic performance and teacher training organizations can be noted in the educational policy. For effective communication with students, teachers, personality and communicate effectively to people inside and outside the organization are important factors that influence the teaching. Other useful measures of teacher "quality education" are. For students, teaching regular, familiar with science-related disciplines, integrating theory and practice, understanding the lessons, the teaching process and absorb important question in class and the teachers', students' understanding of the curriculum, the in order to improve the quality of teaching and observing the lesson outline will help. Under the category of "learning outcomes", encouraging the thinking and research, training, research students, and increase student understanding as well. Teachers also gain insight into students after completion of training and nurturing the creative spirit and cited researcher. The students, "expertise", stated teacher resources and science courses and to update him on the cover and the teachers have high scientific and popular knowledge indicate that teacher expertise. "Character and conduct", teachers are the most important criteria. Teachers, eminent personalities from academic and behavior towards teachers during teaching work. For students, student-friendly manner and respect the character of the teacher's evaluation criteria. The "educational policy", observing students in all aspects of training objectives, training programs not affiliated to pass the course and the availability of tools needed to improve teaching in the field of the factors mentioned.

### 3. Conclusion

It must be acknowledged that in addition to academic training, spiritual and moral education also plays a crucial role in promoting quality education. Emphasis on moral education has always been an inseparable activity Greats Confucius. One of his disciples, saying: "We saw four aspects of education: culture, ethical behavior, honesty, purity and honesty" (Huang, 1997), the last three are part of the spiritual training. Finally, it should be stated that the purpose of education, only "degrees" but more emphasis should be on education and social development of the individual applications. As was observed in this study, there is good agreement between learning styles and teaching methods of teachers which can have a negative impact on learning environments. It is hoped that the authorities would have to align the students and teachers think about the future. Moreover, the aim of education should go beyond the scientific and practical aspects, empirical, cultural and moral well done.

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