

# INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

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# CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	INPUT-OUTPUT COEFFICIENTS IN A NORTH-WESTERN HIMALAYAN REGION AND ITS IMPLICATION TO FINANCIAL RESOURCES <i>AMAR S. GULERIA</i>	1
2.	EFFICIENCY ANALYSIS OF SCHEDULED URBAN CO-OPERATIVE BANKS BY DEA APPROACH <i>SUCHITA GUPTA &amp; DR. MANMEET SINGH</i>	8
3.	THE IMPACT OF FINANCIAL DERIVATIVES MARKET ON THE UNDERLYING CASH MARKET IN NSE <i>DR. N. MOSES &amp; B. PHANISWARA RAJU</i>	12
4.	A STUDY ON EMPLOYEE WELFARE FACILITIES AND ITS IMPACT ON EMPLOYEES SATISFACTION WITH REFERENCE TO INDIAN CEMENT INDUSTRY AT SATNA DISTRICT <i>SHANKAR KUMAR JHA &amp; DR. A. K. PANDEY</i>	17
5.	APPLICATION OF FIREFLY ALGORITHM FOR OPTIMIZING BEVEL GEAR DESIGN PROBLEMS IN NON LUBRICATED CONDITION <i>S. K. RAJESH KANNA &amp; A. D. JAISREE</i>	26
6.	CORRELATION BETWEEN ORGANIZATION STRATEGIES AND EMPLOYEE COMPETENCY MAPPING PRACTICES <i>NIDHI DIXIT &amp; DR. POONAM MADAN</i>	30
7.	CONSUMER AWARENESS ON CONSUMER RIGHTS AND DUTIES: AN ANALYTICAL STUDY WITH REFERENCE TO COIMBATORE CITY <i>DR. V. RANGANATHAN &amp; K. MANGAIYARKKARASI</i>	33
8.	TECHNOLOGY, APPLICATION AND LEGISLATION OF PUBLIC KEY INFRASTRUCTURE FOR SECURE e-GOVERNANCE APPLICATIONS <i>DR. ROHTASH KUMAR GARG &amp; NEHA SOLANKI</i>	38
9.	TO STUDY THE PERCEPTION OF MALE EMPLOYEES ABOUT THEIR FEMALE COUNTERPARTS IN STAR HOTELS <i>ANURADHA KARMARKAR &amp; JYOTI PESHAVE</i>	41
10.	COMPARATIVE STUDY OF MEMORY AND ACHIEVEMENT MOTIVATION OF SENIOR SECONDARY SCHOOL STUDENTS IN RELATION TO RESIDENTIAL BACKGROUND <i>SUSHMA ADHIKARI &amp; DR. P. C. JENA</i>	46
11.	A STUDY ON SOCIAL VALUES, INDIVIDUAL ATTRIBUTES AND PHASES OF ENTREPRENEURIAL ACTIVITY: INDIA Vs. OTHER GEOGRAPHICAL REGIONS <i>M. SUVARCHALA RANI</i>	52
12.	SECURITY PROBLEMS AND STRATEGY IN CLOUD COMPUTING <i>LOCHAN .B</i>	56
13.	SCHEDULED CASTE IN INDIA: PROBLEMS AND PROSPECTS <i>DR. BADSHAH GHOSH</i>	58
14.	IMPACT OF EMPLOYEE ENGAGEMENT ON TALENT RETENTION WITH REFERENCE TO ACADEMICIANS IN GWALIOR REGION <i>VIDHI TYAGI</i>	60
15.	GREEN HRM PRACTICES: A NEW OUT LOOK TO SUSTAINABILITY <i>ALEENA JOY</i>	63
16.	LEARNING & GROWTH ANALYSIS: SIGNIFICANT FOR PERFORMANCE MEASUREMENT <i>SHIKHA BATRA &amp; DR. AMBIKA BHATIA</i>	66
17.	PRIVATE AUDIT FIRMS IN ETHIOPIA: CHALLENGES AND OPPORTUNITIES <i>MUHAMMED ARAGIE &amp; GEBEREAMLAK YITBAREK</i>	70
18.	DETERMINANTS OF FOOTBALL FANS STADIUM ATTENDANCE: PERSPECTIVES FROM GHANA <i>SHANI BASHIRU</i>	79
19.	HEALTH CONSCIOUSNESS AND OPINION LEADERSHIP OF SCHOOL TEACHERS: RESULTS OF A SURVEY FROM THE CITY OF MUMBAI <i>SHATABDI S DAS</i>	86
20.	THE ROLE OF OMBUDSMAN TO CONTROL THE ADMINISTRATIVE ACTIONS IN INDIA <i>RAJESH KUMAR</i>	92
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	<b>97</b>

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## HEALTH CONSCIOUSNESS AND OPINION LEADERSHIP OF SCHOOL TEACHERS: RESULTS OF A SURVEY FROM THE CITY OF MUMBAI

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**MUMBAI**

### ABSTRACT

*According to UNICEF in India over two million children die every year from preventable diseases. India has one of the poorest health records in the world with the highest TB prevalence, every three out of four children have anaemia, and polio eradication is actually backsliding. Many of these deaths are preventable by using vaccines or following basic hygiene norms. But either out of obstinacy or ignorance or fear many do not. It is hypothesised in this study that teachers can play a strong role by imparting health education and consciousness to their students and by being role models in their spheres of influence. But in order to do so the teachers themselves have to have relevant levels of health consciousness and should be respected opinion leaders in their community. In order to test this hypothesis a survey was conducted to study the health awareness levels of the school teachers in Mumbai and the degree to which they considered themselves opinion leaders in their community among government funded and private funded schools. The self administered surveys were followed up with depth interviews. The data collected through the survey was analysed using SPSS. Ver.20. The Personal interview data was subject to content analysis. The results indicated that school teachers in government schools have better awareness about health issues due to NGO interventions, training received etc. They also perceive themselves to have a role to play in the development for a healthy tomorrow.*

### KEYWORDS

health consciousness, opinion leadership, teachers, school-children, healthy habits, obesity control.

### INTRODUCTION

According to UNICEF India over two million children die every year from preventable diseases. Infant Mortality Rate in India is 63 deaths for every 1000 live births. Studies have indicated that more than 16.8 lakh children below five years died of infectious preventable diseases in India in 2010 and more than half of them could not complete the first month of their life (Hindu, 10<sup>th</sup> May 2012). India has one of the poorest health records in the world with the highest TB prevalence, every three out of four children have anaemia, and polio eradication is actually backsliding. With varying social sector budgets, health indicators differ greatly across the country. Many of these deaths are preventable by using vaccines or following basic hygiene norms. But either out of obstinacy or ignorance or fear many do not. It is hypothesised in this study that teachers can play a strong role by imparting health education and consciousness to their students and by being role models in their spheres of influence. But in order to do so the teachers themselves have to have relevant levels of health consciousness and should be respected opinion leaders in their community.

### OBJECTIVES OF THE STUDY

It is hypothesized in this study, that teachers can play a strong role by imparting health education and consciousness to their students and by being role models in their spheres of influence. But in order to do so the teachers themselves have to have relevant levels of health consciousness and should be respected opinion leaders in their community. In order to test this hypothesis a survey was conducted to study the health awareness levels of the school teachers in Mumbai and the degree to which they considered themselves opinion leaders in their community among government funded and private funded schools. Therefore the objectives of the study were to examine:

1. To measure the degree to which school teachers can influence health in the community
2. To compare and contrast the health awareness and consciousness of the school teachers in private and government schools;
3. To compare and contrast the health awareness and consciousness of the English medium school teachers and local medium school teachers.

### LITERATURE REVIEW

The major parameters under study in this study are Health Consciousness and Opinion Leadership.

#### HEALTH CONSCIOUSNESS

Despite the fact, that infectious diseases remain one of the major causes of mortality in the world, especially in developing countries, economic research on policies aimed at limiting their occurrence has been limited. A technology aimed at limiting such diseases has been vaccines. Although the introduction of a vaccine usually produces a sharp drop in the occurrence of a disease, the eradication of vaccine-preventable diseases predicted by many at the time of these inventions has never been achieved. Of the roughly 40 vaccines in the market, only the smallpox vaccine has been successful in eradication. Diseases such as measles, tuberculosis, and different types of influenza still persist, and despite several governmental efforts to eradicate them, and recent attempts to develop a vaccine against HIV or AIDS raise important questions about the causes behind these difficulties (Philipson, March 1997). Remarkable improvements have been made in the past century in the fight against communicable diseases. Respiratory infections and diarrheal diseases, the most leading diseases globally, are responsible for half of all the child deaths every year. The burden of communicable diseases exists in developing regions of the world and children remain particularly vulnerable (Catalina Lopez, Jan 2009). Despite much evidence supporting the effectiveness of measures such as vaccination, improvement in sanitary conditions, and basic hygiene practices in controlling communicable diseases, many developing countries have yet to achieve effective vaccine coverage and remain plagued with poor sanitary conditions. Basic personal hygiene behaviors, such as hand washing, are still not widely practiced. Bearing in mind that school children have rather been consistently vulnerable to the spread of communicable diseases and that the school has been recognized as vital setting for health promotion, hence it becomes imperative to check the prevalence of hand washing behavior among school children (Catalina Lopez, Jan 2009). Health disparities reflect differences in health because of socio-demographic variables, such as race, socio-economic status (SES), and gender. Low-SES individuals consistently have poorer health than high-SES individuals across a variety of morbidity and mortality outcomes. Understanding these relations early in life is critical not only for maximizing children's health but also for understanding the origins of adult disparities in health. Low-SES children have poorer health behaviors, including higher injury rates at young ages and also suffer from chronic impairments, such as higher rates of hospitalization for asthma, and other types of illnesses. Similarly, children belonging to minority groups have poorer health (Edith chen, Apr 2006).

Child health has important effects on learning, on labor productivity (as adults) and more importantly, on child survival and mortality. Consequently, the subject of child health now stands the centre of the most important issue of household welfare in developing countries (Pushkar Maitra, Mar 2006). Improved child health and nutrition are welfare-enhancing in themselves. Better child health and nutrition, in addition, are widely thought to improve various dimensions of child school performance, and therefore subsequent post-school productivity. There are many studies that report significant associations between child health (including nutritional status) and child schooling performance (Pollitt, 1990) (Behrman, 1996).

India has the highest number of undernourished children in the world. The major causes of child deaths in India are diarrhea and acute respiratory infections. Several innovations are available to save the children from dying, for example use of Oral Rehydration Solution (ORS) for diarrhea. However, the management of



diarrhea through ORS is not satisfactory in India. Other causes of child deaths in India are neonatal conditions, malaria, nutritional deficiencies, congenital anomalies, etc. Over-all it has been observed that the child health situation in India, is far from being satisfactory on many factors such as immunization, malnutrition, mortality, etc. Globally, maternal and child under-nutrition is the underlying cause of 3.5 million deaths every year. Under-nutrition occurs due to protein and energy malnutrition as well as micronutrient deficiency. Under-nourishment in children retards physical development and hampers the learning and cognitive processes leading to poor educational, economical and social development. Ignoring under-nutrition triggers the long-term health and development of population at risk (KV Ramani, April-June 2010). Immunization is one of the most cost-effective interventions for preventing a series of major childhood illnesses, particularly in environments where children are under-nourished and may die from vaccine-preventable diseases (KV Ramani, April-June 2010).

"There is plenty of evidence relating to the role of household allocation of resources on children's health outcomes" (Sharmishtha, 2013). Increasing a woman's autonomy has been proved to lead to long-term reductions in infertility, higher child survival rates, and allocations of resources which benefit the children within the household (Eswaran, 2009). It has been found that female autonomy has a significant positive impact on the probability that the children will be taken for formal healthcare for the treatment of respiratory infections and diarrhea (Chakrabarti, 2012). "Female autonomy can be measured in a variety of ways such as income (especially if the woman is the primary contributor) and influence over household decision-making (Kantor, 2003) (Rao, 2004) (Chakrabarti, 2012), education (Jejeebhoy, 1995), labor force participation (Tiefenthaler, 1997) (Eswaran, 2009), freedom of mobility outside the house" (Rao, 2004). Education and labor force participation are the two most commonly utilized measures of female autonomy (Sharmishtha, 2013). (Gupta, 1990) found that women's autonomy, social class, and mother's education significantly influence child survival through improved child care. (Chakrabarti, 2012) also finds to media also leads to greater probability that children will receive formal healthcare.

#### OPINION LEADERSHIP

This paper is concerned with health-related mentoring in public and private schools on an informal and voluntary basis. Mentoring is viewed as an effective educational tool for empowerment, Mentoring is basically a relationship of coaching, counseling and caring shared between a mentor and a mentee (Wertheim, 2006). Traditional mentor relationships are those intimate learning experiences that occur unnaturally and are in direct contrast to formally organized mentoring. Traditional mentoring, therefore, is an organic process which develops naturally and is a vital and transparent relationship between the mentor and the mentee (Bennetts, 2003). One of the most critical issues in the planning of better health care system for developing countries is the training and education of health manpower. In developing countries, significant improvement in health care can occur with the introduction of simple basic curative and preventive techniques such as improvement of water supply, maternal and child health care service, the control of infectious diseases, hand-washing etc. Thus, the need is not so much for high level healthcare manpower, as for an increase in the supply of voluntary healthcare providers such as health workers, medical assistants, assistant nurses, and village health workers (Lori Vanderschmidt, June 1979). Teaching is traditional and scholastic. Teachers rarely use modern educational methods. Too much dependence on western training models often results in programs with excessive emphasis on the applied sciences of physics, chemistry, and biology. More emphasis needs to be placed on primary skills such as sanitation, nutrition, maternal and child health, family planning and disease surveillance (Lori Vanderschmidt, June 1979).

"School-based health centers" consists of physicians, nurse practitioners, registered nurses, and social workers who provide a complete range of primary care, preventive care, and early intervention services to children from early school to high school. In addition, to providing direct health care services, SBHC staff members engage in a wide range of other activities to promote student health (Miles A. McNall, Sep 2010). Three techniques are recognized for improving immunization levels in students in schools. "Method A involved reviewing school immunization records, specifically inviting immunization-deficient children to a school-based clinic. Method B involved sending out permission slips for a school-based clinic to all students without additional investment of nursing time. Method C involved a health education program encouraging parents to have their children immunized on their own" (Thomas Vernon, May 1976).

There is a widespread concern that students are making inappropriate decisions about what they eat, leading to widespread incidence of obesity and chronic illness in young children these days. Inappropriate nutritional decisions and obesity are of significant importance of public-policy (Ross Brennan, July 2010). "School Nutrition programs were one public initiative to combat the problem of wide-spread nutritional deficiencies in the U.S. The National School Lunch Program (NSLP) currently serves children in ninety-eight per cent of the nation's public schools" (Jayanta Bhattacharya, 2006). The United States and many other countries are facing a big problem since most of the children and adolescents are defined as obese or overweight. A study showed that, in addition to a number of adverse medical consequences, over-weight and decreased fitness levels in childhood are associated with poorer academic achievements in school. Changing children's health habits may be a key element in promoting widespread adoption of a healthier lifestyle that could lead to reduction of cardiovascular risk behavior and disease events in the population. "A program defined as the Heart Healthy Program was designed to accomplish three objectives: 1) increase elementary students consumption of complex carbohydrates and decrease consumption of saturated fats, sodium and sugar, 2) Increase their physical activity, 3) Generalize these changes to other family members" (Thomas J. Coates, Jan 1981). Good nutrition contributes to the improved well-being of children and their potential learning and cognitive ability, thus contributing to better school performances (Blades, 2001) (Aranceta, 2001) and there is an evidence that poor nutrition in school-children tends to compromise their learning capacity (Tompkins, 1998) (W, 1999). Several studies have found out that well-designed and well-implemented school-based programs can improve the physical activity and eating behaviors of young people (Contento I, 1995) (Robinson, 1997)

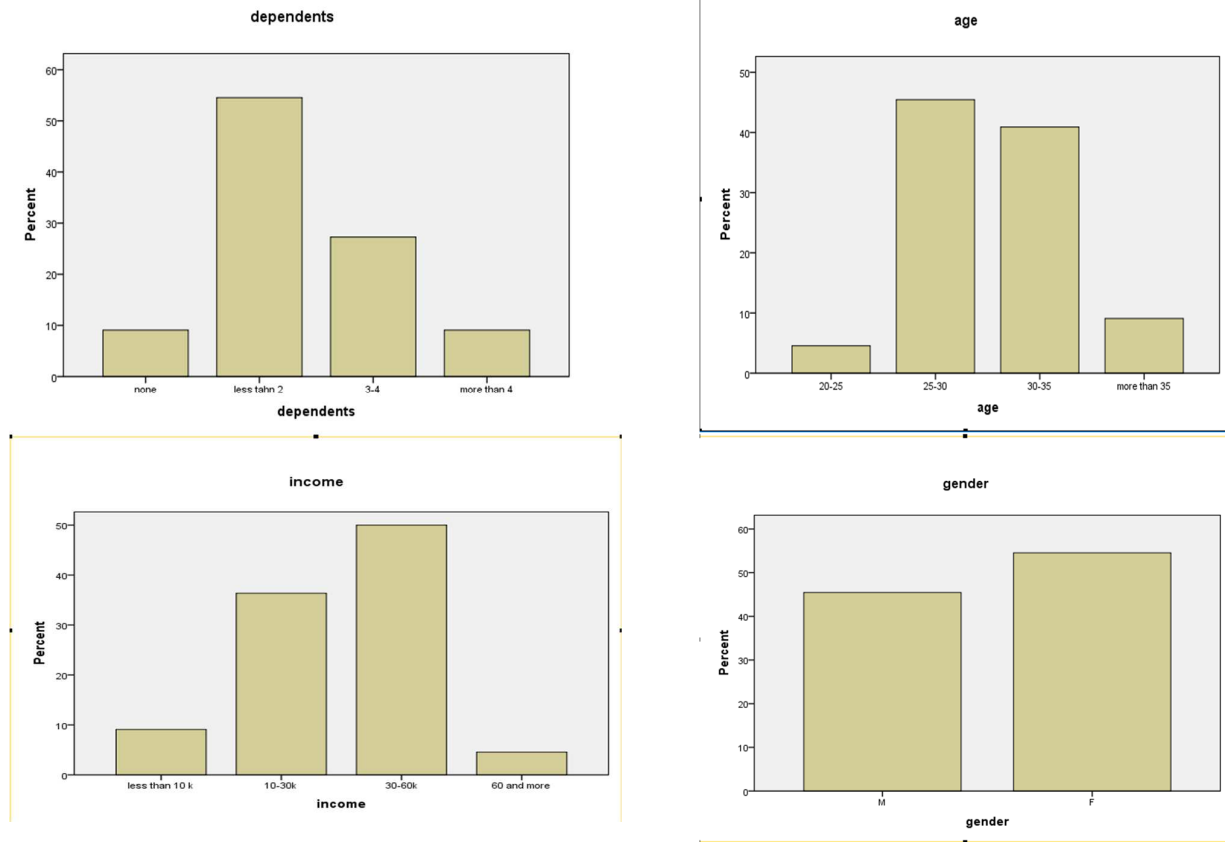
Schools are an ideal setting to inculcate healthy diets and encourage high level of physical activity because they are responsible for administering at least one third of a child's food intake during the school day and they can function as an educational role models for healthier food choices. To institute healthier eating habits in children, all early, middle and high schools shall eliminate all high-processed unhealthy foods, colas and beverages (Heyman, 2006) (Littledyke, May 2008).

#### METHODOLOGY OF THE STUDY

In order to test this hypothesis a survey was conducted to study the health awareness levels of the school teachers in Mumbai and the degree to which they considered themselves opinion leaders in their community among government funded and private funded schools. The self administered surveys were followed up with depth interviews. The data collected through the survey was analysed using SPSS. Ver.20. The Personal interview data was subject to content analysis.

**FINDINGS AND ANALYSIS**  
**PROFILE OF THE RESPONDENTS**

FIG. 1 to 4



**PROFILE OF THE SCHOOLS COVERED**

FIG. 5

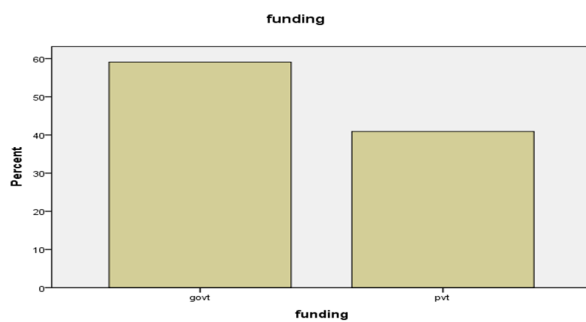
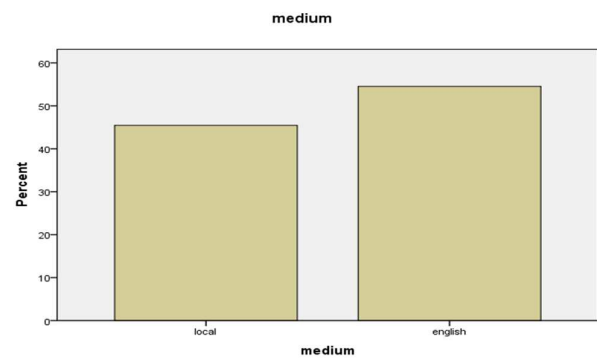


FIG. 6



Most of the respondents were between 25-35 years old and had an family income level of Rs.30,000 to Rs.60,000. Both gender are represented and schools with both government and private funding are represented in the sample. The medium of education of the schools the teachers were associated with was either English or Marathi.

**HEALTH CONSCIOUSNESS OF TEACHERS**

*Difference in Health Consciousness in teachers of both genders*

TABLE 1: T-TEST

	Gender	Mean	Std. Deviation	T	df	Sig.
Health Consciousness	Male	3.3286	.44186	0.618	18.88	0.544
	Female	3.2143	.41982			

Not surprisingly there is no significant difference in Health consciousness of the different genders since these individuals are products of their environment.

**Difference in Health Consciousness in teachers of different income groups**

**TABLE 2**

		Mean	F	df	Sig.
Health Consciousness	Less than 10 k	3.0000	.275	3	.843
	10-30k	3.2679			
	30-60k	3.3117			
	60k and more	3.2857			
	Total	3.2662			

What possibly is surprising that increasing income is not influencing increase in awareness of health though positive attitude towards health is indicated by the mean values in the higher income groups.

**Difference in Health Consciousness in teachers of different age groups**

**TABLE 3**

		Mean	F	df	Sig.
Health Consciousness	20-25	2.8571	.496	3	.69
	25-30	3.2143			
	30-35	3.3333			
	more than 35	3.4286			
	Total	3.2662			

Similarly age creates no significant difference in health awareness though the trend in data does indicate that older teachers are more aware.

**Difference in Health Consciousness in teachers of private and Government schools**

**TABLE 4: T-TEST**

	Funding	Mean	Std. Deviation	t	df	Sig.
Health Consciousness	Govt	3.2747	.41	.109	16.33	.931
	Private	3.2540	.45			

It is generally assumed that private schools give more importance to health related aspects but this analysis negates this understanding and the trend in data indicates that government school teachers give more importance to health inspite of the lack of statistical significance.

**Difference in Health Consciousness in teachers of English medium and local medium schools**

**TABLE 5: T-TEST**

	Medium	Mean	Std. Deviation	t	df	Sig.
Health Consciousness	Local	3.3429	.56	.722	12.36	.482
	English	3.2024	.26			

It is also generally assumed that English medium schools give more importance to health related aspects but this analysis again negates this understanding and the trend in data indicates that local medium school teachers give more importance to health inspite of the lack of statistical significance.

**OPINION LEADERSHIP OF TEACHERS**

**Difference in Opinion leadership in teachers of both genders**

**TABLE 6: T-TEST**

	Gender	Mean	Std. Deviation	t	df	Sig.
Opinion leadership	Male	3.4000	.70	.255	15.01	.794
	Female	3.3333	.36			

There is no significant difference in opinion leadership of the different genders but the mean value indicates that men perceive themselves as more listened to. This again is part of the Indian culture.

**Difference in Opinion leadership in teachers of different income groups**

**TABLE 7**

		Mean	F	df	Sig.
Opinion leadership	less than 10 k	3.2500	2.09	3	.137
	10-30k	3.1563			
	30-60k	3.6136			
	60k and more	2.5000			
	Total	3.3636			

Increasing income is not influencing significant increase in opinion leadership though positive increase is indicated by the mean values in the higher income groups.

**Difference Opinion leadership in teachers of different age groups**

**TABLE 8**

		Mean	F	df	Sig.
Opinion leadership	20-25	3.5000	.57	3	.981
	25-30	3.3500			
	30-35	3.3333			
	more than 35	3.5000			
	Total	3.3636			

Again increase in age does according to the mean values bring with it more respect in society but possibly since the sample is predominantly young, this is not indicated as statistically significant.

**Difference in Opinion leadership in teachers of private and Government schools**

**TABLE 9: T-TEST**

	Funding	Mean	Std. Deviation	t	df	Sig.
Opinion leadership	Govt	3.3846	.58	.2	17.03	.844
	Pvt	3.3333	.59			

Again surprisingly government school teachers are more confident of their leadership in society.

TABLE 10: T-TEST

	Medium	Mean	Std. Deviation	t	df	Sig.
Opinion leadership	Local	3.4750	.54	.83	19.8	.416
	English	3.2708	.60			

Again similarly, local medium school teachers are more confident of their leadership in society

## DISCUSSION, LIMITATIONS AND CONCLUSION

Not surprisingly there is no significant difference in Health consciousness of the different genders since these individuals are products of their environment . What possibly is surprising that increasing income is not influencing increases awareness of health though positive attitude towards health is indicated by the mean values in the higher income groups. It is generally assumed that private schools/English medium schools give more importance to health related aspects but this analysis negates this understanding and the trend in data indicates that government school teachers/local medium schools give more importance to health. Increase in age and income does according to the mean values bring with it more respect in society but again surprisingly government school teachers and local medium teachers are more confident of their leadership in society.

These surprising findings are limited by a small sample size, the self reporting methodology adopted and since its scope is limited to the urban areas of Navi-Mumbai and Mumbai but it can be summarized from the personal interviews with these teachers that there has been considerable interventions of NGO's and other welfare societies especially in government/local medium schools to increase health awareness of both students and teachers. Sometimes training in health and hygiene through workshops etc, are being offered. Since the message is reaching these teachers from different sources, they feel more equipped. Moreover since they are enlisted for several governmental tasks, the teachers feel that the people around them look up to them. In addition to NGOs, Business houses too are taking an increasing interest in health and education through their CSR initiatives but more room exists for further developmental activities in this sphere.

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## ANNEXURE

### QUESTIONNAIRE

Q1: How many dependents are there in your family?

a) None b) <= 2 c) 3-4 d) > 4

Q2: Please indicate your agreement with the following statements: (1-completely disagree, 2- disagree, 3-neither agree nor disagree, 4-agree, 5- completely agree)

a. My friends and neighbors' often ask my advice about health related issues

- b. I sometimes tell them how to handle some health related issues
- c. I feel I am generally regarded by my family/friends/neighbors' as a good source of advice on health
- d. I can think of at least two people whom I have helped with some health issue in the last six months

Q3: Please indicate your agreement with the following statements:

(1-completely disagree, 2- disagree, 3-neither agree nor disagree, 4-agree, 5- completely agree)

- a. I always choose snacks such as fruits and vegetables.
- b. I eat regular, well-balanced meals.
- c. I enjoy eating nutritiously and exercising regularly.
- d. When sick or injured, I usually seek medical attention immediately.
- e. I exercise vigorously 4-5 times weekly.
- f. I drink at least 6 glasses of water in a day
- g. I finish my prescribed medicine course fully

Q4: Age:

Q5: Income:

- <10,000 a month
- 10,001- 30,000 a month
- 30,001- 60,000 a month
- 60,001 and more a month

Q6: Gender: Male /Female (to be filled in by the researcher)

Q7: Which of the following best describes the area the respondent lives in? (to be filled in by the researcher)

- Urban
- Suburban
- Rural

Q8: School associated with: (to be filled in by the researcher)

- a. Local medium/ English Medium
- b. Government/ Private

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