

# RELATIONSHIP BETWEEN GROUP POLARIZATION AND ATTITUDE TOWARDS WORK AMONG SECONDARY SCHOOL TEACHERS IN GUCHA SUBCOUNTY, KENYA

<sup>1</sup>AYIERA KERUBO EUNICE, <sup>2</sup>DR ALOKA JAIRO PETER, <sup>3</sup>DR MWEBI BENARD

<sup>1,2,3</sup>JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

---

**Abstract:** The purpose of this study was to explore the relationship between group polarization and attitude towards work among secondary school teachers in Gucha Sub County. Objectives were: to find out the relationship between social comparison and attitude towards work among teachers, to find out the relationship between persuasive arguments and attitude towards work among teachers. The study adopted the Concurrent triangulation research design within the mixed methods approach. It was further informed by Decision Emergence Theory by Fisher (1968). The units of analysis were 20 secondary schools. The target population was 278 teachers, 21 Deputy Principals (D/Ps) and 1 Sub-county Quality Assurance and Standards Officer (SCQASO). The sample constituted 71 teachers, 6 D/Ps and 1 SCQASO. Teachers were picked out through stratified random sampling technique while the D/P's and the SCQASO were selected through purposive sampling. The instruments of data collection were questionnaires and interview schedules. Validity of the questionnaires was ascertained by the researcher's supervisors. Piloting was done in two secondary schools outside the sub county. Split half technique was used to work out the reliability of the questionnaires and a reliability coefficient of  $r=0.876$  was obtained. Quantitative data was analyzed by descriptive statistics such as the mean, frequency counts and percentages and inferential statistics such as Karl Pearson's Product Moment correlation and presented in tables. Qualitative data was also analyzed using the thematic analysis. The results indicated a strong positive relationship ( $r=0.816$ ) between social comparison and attitude towards work. The coefficient of multiple determination ( $R^2$ ) was 0.667 which means that 66.7% of the variability in attitude towards work was predicted by social comparisons amongst the teachers. This variability is large, meaning that social comparison among teachers is one of the major factors that influence the attitude of teachers towards their work. There was a medium positive relationship ( $r=0.522$ ) between persuasive arguments and attitude towards work.  $R^2$  was 27.3%. Therefore, persuasive arguments were responsible in predicting 27.3% of the variability in attitude towards work. The study therefore revealed that the independent variables viz: social comparison and persuasive arguments together explain 71.8% of the variability in attitude towards work among teachers. 29.2% of attitude towards work among teachers can be explained by other factors not investigated by this study. The study concluded that there was a significant relationship between group polarization and attitude towards work among teachers. It was recommended that the Ministry of education through the Principals should ensure that teachers are provided with a satisfying work environment so that teachers may not regroup and form negative attitudes. The study may be significant to teachers, principals and education officials. A study on the influence of teachers' working environment on teachers' attitudes would expound the present study.

**Keywords:** Attitude towards work, Group polarization, social comparison, persuasive argument and Secondary school teachers.

---

## 1. INTRODUCTION

### 1.1 Background to the study:

Teachers' attitude is very vital since the success of the teaching and learning processes, which entail the teacher's work, fully depend on it. A teacher's attitude towards work can be defined as a set of evaluations of his job which constitutes his feelings towards, believes about and attachment to the process of teaching and learning (Judge and Kammeyer-Mueller, 2012). It should be the attitude that gets the best results for our students (Kaplan, 2016). Attitudes are conceptualised as relatively stable constructs comprising cognitive, affective and behavioural components (Vaz, Wilson, Falkmer, Sim, Scott, Coldier and Falkmer 2015). Gurray (2016) points out that the achievement of learning depends on affective factors such as attitude and motivation. For this reason, the argument by Colomeischi and Colomeischi (2014) that the learning success of students is influenced by teachers' attitudes should be taken seriously. As a result, the attitude of a teacher has been a major concern of many countries (Vaz, et.al, 2015). After examining various studies around the world, it becomes obvious that teachers' attitudes are mostly negative and this is not favourable to learners' performance in school activities. This necessitated research into a variety of factors that influence the teachers' attitudes towards their work.

In the year 2015, Education International (EI), the International Labour Organization, (ILO), and United Nations Educational, Scientific and Cultural organization (UNESCO) and the Committee of Experts on the Application of the Recommendation concerning Teaching personnel (CEART) commissioned a study onto the attitude of teachers. The study was carried out by Symeonidis (2015). 55 countries from all over the world participated in the study through teachers' unions and the aim was to gather data on various aspects of a teacher. The study reported that teachers' attitudes towards work were low due to teachers' low status in society. In Europe, Symeonidis (2015) reported that the attitude of teachers had declined dramatically in the recent years. This was due to austerity measures imposed on and by the government which de-professionalizes the teaching profession and undermines teachers. In Africa, over ½ of the respondents reported a decline in teacher status and hence attitudes over the last 10 years, which was attributed to low salaries, poor working conditions, low quality of teacher education programmes, low standards of entering the profession, wrong media image, inadequate government consultation with teachers through their unions among other factors. The low status of the teaching profession lowers the teachers' attitude (Symeonidis ,2015). In addition, the study revealed that student material and teaching equipment were not always free or were of inadequate quality. According to the survey over ½ of the respondents reported that teaching was not considered an attractive job for young people and higher teacher attrition was reported across all sectors. It was further reported that initial and / or continuous professional education was not free or included in the teachers' workload in many countries.

The study also reported that the attitude of teachers declined because of lack of freedom of expression, association and collective bargaining. Where limited freedom of association was reported, teachers were denied the right to strike or they rarely exercised it (Symeonidis (2015). The study also revealed that in most surveyed countries, governments allowed union representation in collective bargaining, yet collective agreements have been unilaterally altered or cancelled in recent years. These are the major factors that have hindered the attitude of teachers in many countries.

In Canada the attitudes of teachers were studied and found to be mostly negative and were determined by emotional intelligence, self-efficacy, age and level of training (Colomeischi and Colomeischi ,2014; Vaz, Wilson, Falkmer, Sim, Scott, Coldier and Falkmer, 2015). There was a relationship between emotional intelligence, self- efficacy and work mentality and work satisfaction and these factors explained the variability in attitudes among teachers. Soibancha (2016) also found out that those teachers whose educational qualifications were low had unfavourable attitudes towards teaching, while more qualified teachers had positive attitudes. Further, younger teachers seemed to have more positive attitudes than older teachers. Karr (2011) also noted that appropriate training can significantly improve teachers' attitudes towards teaching. Similar sentiments were echoed by Sokal and Sharma (2014) who reported teachers' negative attitudes towards inclusion in Canada. The study found out that teachers who had undergone relevant training had less negative attitudes.

Gurray (2016) discovered that prospective teachers had negative attitudes towards being a teacher even though they had undergone teacher training. Results indicated that the more negative the student teachers' attitudes towards English were, the more negative their attitudes were towards the teaching profession. However after comparing the attitudes towards English and towards being a teacher, student teachers' attitudes towards English were higher than being a teacher.

In Nigeria the attitude of teachers are mostly negative as evident from various studies. A case study in the University of Benin, by Aadu and Egherevba (2016) found out that student teachers had negative attitudes towards the teaching profession. The students were not willing to take up the job because of its low status, poor condition of service of teachers and the negative perception of the teaching profession by the society. Maliki (2013) indicated that teachers have negative attitudes towards the teaching profession. Further, male teachers had more negative attitudes towards teaching than female teachers. Maliki (2013) therefore recommended that the government should increase teachers' salaries and make matters concerning teachers as high priority. Besides, Lasisi, Ani, Lasebikan, Sheikh and Omigbodun (2017) attributed teachers' negative attitudes towards students with attention-deficit hyperactivity disorder (ADHD) to lack of relevant training. In their study, teachers who underwent training significantly improved their attitudes towards ADHD. Orji and Enyiamaka (2018) did a study in Nigeria and found that the attitude of secondary school teachers was negative due to a poor work environment like interpersonal relationships, workload and physical work conditions which would trigger the commitment level of teachers.

In addition, in South Africa, teachers express negative attitudes towards their work due to various factors found out by several studies. Through a survey Mobara and Soraya (2015) found out that teachers had negative attitudes towards the implementation of inclusion in the classroom. They established that male teachers had more negative attitudes than female teachers. Similarly, teachers with higher teaching experience had more negative attitudes than those with less teaching experience. A similar situation was reported in Cameroon by Nalova (2016), where the teachers' attitudes had been found to be the strongest barriers to the implementation of inclusive education in secondary schools. Also, in their study, Isaiah and Nenty (2012) revealed that job dissatisfaction among teachers had contributed significantly to their inability to attain their educational goals at all levels. It concluded that refusal of parents to get involved in the education of their children significantly contributed to this dissatisfaction, an expression of negative attitudes by the teachers.

In Kenya, Kinuthia, Kombo and Mweru (2013) found out that ECDE teachers had negative attitudes due to low levels of training and few years of teaching experience. Further, the attitudes of teachers in private schools were more negative as compared to those in public schools. According to Ruto and Ndaloh (2013), such attitudes affect teachers' interests, pride, subject preference and generally the achievement of their teaching and learning objectives. Wanderi (2015) asserts that the commitment of teachers depends entirely on their attitudes. Thus, enhancing teachers' attitudes improves teacher's commitment in school activities. In his study, Ochiewo (2016) found an insignificant correlation between teachers' attitudes and their commitment to service. Another study by Njogu, Mukolwe and Ogolla (2011) found a significant relationship between the attitude of teachers and students' discipline.

Several studies have revealed evidence of the negative attitude towards work among teachers in Kisii County. Mosomi (2015) studied attitudes of ECDE teachers' attitude towards work and found out that they were generally negative. The study noted that job satisfaction plays a key role on how teachers perform their duties. The study further reported that lack of basic infrastructural and enabling environments would polarize teachers' attitudes towards their work. Mosomi (2015) concurs with Getange, Nyakan and Sagwe (2015) who recommended promoting teachers' morale in terms of remuneration, better working conditions and provision of adequate and relevant teaching and learning facilities, lack of which, would lead to negative attitudes among teachers. Omae, Onderi, Mokogi, Bantu and Barongo (2016), associated teachers' negative attitudes to lack of continuous skill upgrading. A study by Ombui (2014) reported evidence of negative attitudes towards work among teachers, and noted that such attitudes may affect learning greatly in Kisii County.

In Gucha, there is evidence of teachers' negative attitude towards their work as revealed by several studies: A study by Abobo (2017) reported that teachers had negative attitudes towards life skills and attributed the attitude to inadequate facilities and lack of teacher training in life skills. A similar study by Ong'uti, Aloka and Raburu (2016) found out that teachers had negative attitudes towards teaching and learning in mother tongue. This was explained by the negative attitudes of parents and learners, lack of teacher training in the area as well as lack of teaching and learning facilities. Further, Ombui (2012) carried out a study which found out that teachers had negative feelings towards teaching and associated this to the parents' and learners negative attitudes.

While several studies have been done to investigate the variables influencing attitudes towards work, very scanty literature is available on the influence of group polarization. According to Elena (2015), group polarization is the group tendency to make a decision after discussion, that is more extreme (either more risky or cautious) than the initial

preferences of the group. In the process, a group's attitude may change to be more extreme in either direction (Coleman, 2013). Coleman goes on to argue that the phenomenon occurs due to social comparison where an individual wants to be accepted and seen in a positive way by the group members. In addition, Elena (2015) asserts that individuals shift when exposed to arguments and information that weren't available to them when they made their initial decision, which she refers to as persuasive argumentation. Besides that, group think can cause group polarization phenomenon (Heffner, 2014). According to Aguilar (2014), group think is the mode of thinking that occurs when the desire for harmony in a decision making group overrides a realistic appraisal of alternatives.

### 1.2 Statement of the Problem:

Studies in Gucha have revealed negative attitudes among teachers as attributed to various variables including; parents' and learners' unfavourable attitudes, inadequate teaching and learning facilities and lack of sufficient teacher training (Ombui, 2012; Ong'uti, Aloka and Raburu 2016; Abobo 2017). Besides, there is a lot of laxity among teachers in the performance of their duties, which is coupled with teacher absenteeism from schools with very lame excuses. While studies have attributed the attitude of teachers to several factors, no known study has been carried out on the role of group polarization on attitude towards work among teachers. The present study therefore seeks to explore the relationship between group polarization and teachers' attitudes towards work among secondary school teachers in Gucha sub-county, Kenya.

### 1.3 Purpose of the study:

The purpose of this study was to explore the relationship between group polarization and teachers' attitudes towards work among secondary school teachers in Gucha sub-county, Kenya.

### 1.4 Objectives of the study:

The study objectives were:

- i. To investigate the relationship between social comparison and attitudes towards work among secondary school teachers in Gucha sub-county.
- ii. To find out the relationship between persuasive arguments and attitudes towards work among secondary school teachers in Gucha sub-county

### 1.5 Hypotheses of the study:

The following were the hypotheses of the study:

- i) **Ha<sub>1</sub>**. There is a statistically significant relationship between social comparison and attitudes towards work among teachers in Gucha Sub County.

**Ho<sub>1</sub>**. There is no statistically significant relationship between social comparison and attitudes towards work among secondary school teachers in Gucha Sub County

- ii) **Ha<sub>2</sub>**. There is a statistically significant relationship between persuasive arguments and attitudes towards work among teachers in Gucha sub -county.

**Ho<sub>2</sub>**. There is no statistically significant relationship between persuasive arguments and attitudes towards work among secondary school teachers in Gucha Sub County

### 1.6 Assumptions of the study:

This study was based on the following assumptions:

- i) That there is relationship between social comparison and attitudes towards work among secondary school teachers in Gucha sub-county.
- ii) That there is relationship between persuasive arguments and attitudes towards work among secondary school teachers in Gucha sub-county

## International Journal of Novel Research in Education and Learning

Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

### 1.7 Scope of the study:

The study was concerned with the relationship between group polarization and attitude towards work among teachers. The elements of group polarization studied were social comparison, persuasive arguments.

### 1.8 Limitations of the study:

The following limitations were experience and dealt with.

- i) The unwillingness of the respondents to open up fully, this being a sensitive issue that made them suspicious.
- ii) The respondents had their personal biases which would interfere with the findings.
- iii) Sampling also posed problems, especially in terms of gender representation since there were very few female teachers in the area of study.

### 1.9 Significance of the study:

The findings of the study would be significant in the following respects:

Teachers may benefit from this study as it may help them make cautious attitude shifts as opposed to risky shifts since they would learn to avoid group think and its subsequent effects and remain open to external criticism and advice. They may be role models of students and avoid making extreme decisions due to extreme attitude shifts. The findings may also be important to the school principals since they give them knowledge on how to conduct disciplinary hearings in school. They may get better ways of fostering positive attitudes among teachers. Besides that, the study may help the Ministry of Education to curb future group polarization among teachers. They may apply the recommendations of the study and employ permanent counsellors in schools. The TSC may benefit from the findings as they may learn why teachers may develop negative attitudes towards their work. This study may also be useful to the researcher as he may uncover critical issues of counselling, that is, the negative group dynamics such as group polarization, which have not been explored before. It can further help the researcher develop a theory. Finally it may be useful to future researchers as it may provide reference data in conducting new researches.

### 1.10 Theoretical framework:

This study was guided by Decision Emergence theory by Fisher (1968). The theory outlines four phases that a group goes through in the decision making process. The distribution of different tasks and decision making, when managed successfully, makes the team stronger (Fisher, 1970).

The four phases are explained as follows: The orientation phase is the first phase characterized by primary tensions and uncertainty since the group members have not known each other well. The members lay a lot of emphasis on clarification and agreement though a high level of agreement is expressed by ambiguity. The phase thus includes getting acquainted, clarifying and tentatively expressing attitudes. It is a period of forming opinions not rocking the boat and getting rid of social tensions (Fisher 1970).

The second phase of decision making according to Fisher (1968) is referred to as the conflict phase. Here new ideas are discussed and there may be significant tensions (secondary tension) as the proposers and champions of alternative approaches interact. This is the phase where persuasion occurs. Also ambiguous attitudes from the orientation phase now become polarized attitudes, fostering coalitions. Furthermore, arguments become the norm and a lack of argumentativeness (or apathy) is considered deviant behaviour. This is because the conflict is seen as positive because it helps the group achieve positive results. Leaders emerge at this stage (Fisher 1970)

The next phase is the emergence phase. It is the longest gradual phase. In this phase, there is significantly less criticism since group members soften their position and undergo the attitudinal change that makes them less tenacious in defending their individual viewpoints. Ambiguity emerges again. What was a strong unfavourable attitude in the conflict stage is now an ambiguous disagreement (referred to as modified or muted dissent). Such a pattern allows group members to save a face as the decision emerges. In addition the group does not make decisions; rather decisions emerge naturally from group interaction. The members compromise to achieve consensus and the group progresses towards unanimity (Fisher 1970)

Reinforcement is the final phase of this decision making theory. Here the group members bolster their final decision by using supportive verbal and non-verbal communication. Therefore as the group enters this phase they have a strong emerging decision. This decision reflects real agreement rather than avoidance of conflict. Also, favourable views of the decision proposal are expressed and they receive agreement and reinforcement. Finally there is a spirit of unity and verbal backslapping by the members, thus the decision and the group interaction create solidarity (Fisher 1970)

This theory informs the present study in that when teachers meet in their groups to make decisions, they have to go through all the four phases. Teachers go through the orientation phase, regardless of whether they already know each other or not. This is because the issue at hand is new; hence they familiarize themselves with it. Teachers undergo the conflict phase as they start raising their divergent opinions about the phenomenon under discussion. In this phase, each teacher is required to give ideas; otherwise they may be labelled as rebels. In the emergence phase, a decision naturally emerges; it is not made. Attitudes change and teachers adjust their positions about the issue. The reinforcement phase happens when teachers support the dominant position. They reflect real agreement rather than avoidance of conflict. In the process, group polarization may, or may not occur depending on how careful the members.

## 2. LITERATURE REVIEW

### 2.1 The Relationship between Social Comparison and Attitudes towards Work among Teachers:

Social comparison is a situation where individuals evaluate themselves against other individuals in terms of their performance, achievements, abilities, opinions and beliefs. According to Festinger (1954), social comparison is meant to reduce uncertainty in various domains and define the self. There are some empirical studies concerning the influence of social comparison on the attitudes to work among teachers and other groups of people. In his research article, Bresnahan (2013) came to the conclusion that social comparison causes group polarization. In his literature review he says, "Every member of the group wants to fit in to avoid being black balled for being different". He says that social comparison theory proposes an action that allows one to discover either implicitly or explicitly others' positions on an issue which leads to a choice shift, with the direction of the shift dependent upon the way others respond. Bresnahan (2013) arrived at these findings through experimentation, a quantitative research design, using 14 undergraduate students of Edinboro University of Pennsylvania. 7 students were male and 7 female. The students were given questionnaires with two choice dilemmas. Bresnahan (2013) applied experimentation technique in his study, where the subjects were observed under artificial, controlled environments, hence did not give them the opportunity to express themselves in their natural environments. Also, participants did not express their opinions. However, the present study employed the mixed methods technique where apart from numerical data, respondents gave a detailed narrative of their experiences on how social comparison influences the attitude of teachers. In the reviewed study, the sample was too small to be representative; only fourteen students out of a university population and majority of the participants were drawn from the disabled community of the University. A small sample may not produce the salient characteristics of the target population to an acceptable rate. It also increases the sampling error margin. But the present study had a large sample size and this reduced the margin of error. The present study further selected participants through stratified technique which ensured all characteristics in the target population were well represented.

In Canada, Stasio, Savage and Giovani (2016) did a study to examine how social comparison, competition and teacher-student relationships as classroom characteristics were associated with bullying and victimization among junior high school students in grades 7 and 8. Results of Hierarchical linear modelling (HLM) revealed that increased social comparison, competition and teacher-student relationships were related to bullying and victimization. The study tests a conceptual model of youth outcomes that highlights the importance of modelling the effects of teaching practices as proximal structural conditions at the classroom level ( $N = 38$ ) that affect bullying outcomes at the individual level ( $N = 687$ ). The target population of this study was students only. It ignored teachers and schools administrators who should have given expert information about social comparison and bullying. The present study therefore had teachers as its target population and included the Deputy Principals and the SCQASO who gave expert opinions on teachers' attitudes.

Another study was done by Kitchel, Smith, Henry, Robinson, Lawver, Park and Schell (2012) in the USA to determine if a relationship existed between social comparison, job satisfaction and burnout among secondary school Agriculture teachers. The study reported that teachers tended to engage in upward comparisons, leading to inspirational emotional outcomes. Several moderate relationships were found between dimensions of social comparison and either burnout or job

satisfaction. The population of the study represented 6 states. While this study targeted only Agriculture teachers, the present study will target teachers in all departments in secondary schools, thus reducing the error margin that arises from sampling. The reviewed study was done in the USA unlike the present study which took place in Kenya.

Tenbrook (2016) carried out a study to explore the appropriate methodology for addressing questions of how social comparison operates in academic and occupational choice. The study reported that the career decision makers identify and compare themselves with other people on relevant dimensions in order to gain more information about them. In this study, participants were explicitly asked about their own social comparison behaviours and preferences in occupational decision making either before or after fictional career speakers which served as comparison targets. Upward targets were chosen or evaluated more highly as comparison targets. Also, various participant variables such as vocational interests, sex, career aspirations and gender self-concept influenced their evaluation and selection of comparison targets. The reviewed study employed qualitative methods only, which would produce highly subjective data, the present study made use of mixed methods techniques where both opinion and numerical data were collected and they complemented each other.

Wang, Zhu, Maguire, Liu, Pan, Li and Hu (2016) carried out a study on the influence of social comparison and peer group size on risky decision making in China. Participants were presented with a scenario describing an exam and presented with an opportunity of making a risky decision in the context of different information provided about the performance of their peers. It was found out that behaviour was influenced by not only social comparison but also by the size of the comparison group, that is, the larger the group, the more polarized the behaviour it prompted. The results therefore indicate that decision making is influenced both by social comparison and the number of people making the social reference group. While the reviewed study applied quantitative research technique, specifically experimentation which lacked the qualitative aspect where participants would express their feelings and opinions, the present study applied mixed methods research technique, so that both qualitative and quantitative techniques complement each other. Further, the reviewed study was done in China and not in Kenya, while the present study was done in Gucha sub-county, Kenya.

Rahimi, Hall, Wang, and Maymon (2017) carried out a study on the effects of the three types of comparison in teachers (downward, horizontal and upward), as moderated by years of teaching experience on burn out, job satisfaction and intentions to quit, discreet teaching related emotions and illness related symptoms. Their sample constituted 513 teachers. It was found out that downward comparison with worse off others positively predicted job satisfaction and anger; horizontal comparison with similar peers had unanticipated negative effects on all the assessed variables while upward comparison to adaptive role models predicted better levels on each study outcome. Further, the results showed significant interaction between upward comparison and teaching experience on job satisfaction, intentions to quit and enjoyment. New teachers reported higher job satisfaction and enjoyment and lower intentions to quit after engaging in upward comparisons. The reviewed study had a large sample which would magnify the bias associated with sampling error. To avoid this, the present study made use of a smaller sample.

Ueno and Yokogawa (2017) did a study to examine the mechanism of group polarization phenomenon from a social comparison point of view. The subjects of the study were 125 female undergraduate students who were randomly assigned one of the four experimental conditions outlined as follows: in H, the subjects refer to target persons as having higher ability than theirs; in M, the subjects refer to target persons as having similar ability to theirs; in L, the subjects refer to the target persons as having less ability than their while the fourth condition was a control one. In addition to the experimental conditions, the subjects were exposed to opinions elicited and averaged from the target persons in the 3 conditions and Choice Dilemma Questionnaires were used as task materials. It was found out that polarization was more prevalent in in M condition than in H condition but the tendency could not be confirmed. The study concluded that ability comparisons could be related to the mechanism of group polarization phenomenon. While in the reviewed study the participants were only female undergraduates, the participants of the present study were both male and female teachers to ensure representation of both genders. Also, the reviewed study employed quantitative techniques only, specifically experimentation, thus denying participants the opportunity to give their own opinions, feelings and beliefs. The present study on the other hand, used mixed methods research techniques which made it possible to obtain more comprehensive data, both opinion-based and numerical.

Yperen, Brenninkmeijer and Buunk (2017) did a study to demonstrate that individual effort performance expectancy can explain responses to social comparisons. The target population of the study was practicing teachers. The study applied quantitative technique of experimentation where experiment 1 had a population of N=100 and experiment 2 with N=162. The study found out that exposure to a superior colleague generated more positive effect among teachers than exposure to an inferior other. Explaining the targets' superior performance in terms of high effort and inferior performance in terms of low effort, enhanced participants' intentions to work harder on their own jobs. The reviewed study arrived at the results through quantitative techniques of experimentation where subjects were studied under controlled conditions and were denied the opportunity to express their opinions and feelings in a detailed manner. However, the present study applied mixed methods approach that yielded both numerical and opinion data that was more detailed and easy to comprehend.

A study was done by Utz and Muscanell (2018) to establish whether social comparison elicited envy or pride. The study sampled 419 participants and applied quasi-experimental design. The study found out that the achievement of others elicited envy while personal achievements elicited pride. Further, people who were exposed to their personal achievements against the achievement of others showed a motivation to work harder. The reviewed study arrived at its findings through quantitative techniques only thus, it lacked the qualitative part where participants would give their opinions. The present study on the other hand made use of mixed methods technique where both quantitative and qualitative data were obtained which produced both numerical data and as well as the opinions of the respondents and both sets of data complemented each other.

Gigasari and Hassaskha (2017) studied the factors influencing teachers' level of burnout, among them, social comparison tendencies. 279 Iranian teachers participated in the study. The data collection instrument was a 46-item scale which was meant to address the teachers' degrees of burnout, social comparison tendencies and instructional efficacy. Data analysis was by Spearman's Rank Order Correlation. The study found out a positive significant relationship between downward comparison and burnout and depersonalization. Next, teachers' upward comparison tendency showed a positive effect on teachers' sense of instructional efficacy. The examined study took place in Iran but the present study was done in Kenya.

A study by Rahimi (2014) investigated the effects of the three forms of social comparison among teachers (upward, horizontal and downward comparisons) on burnout, intentions to quit and emotions. 526 teachers were participants in the study. It was found out that upward social comparison positively predicted job satisfaction, personal accomplishments and enjoyment while they negatively predict emotional exhaustion, intentions to quit, anxiety and anger. Downward comparisons were found to positively predict job satisfaction and also predict anger. Horizontal comparisons, however had unanticipated effects on any of the given variables. The reviewed study had a very large sample size hence the danger of sampling bias. The present study had a small sample hence it easy to overcome the bias.

Downes (2015) carried out a study applying social comparison to better understand a social context; the performance of other people at work. The study tested whether the relationship between upward and downward comparisons and motivation were moderated by goal orientation. The study reported that interaction with higher performing colleagues and lower performing colleagues provided referents against which people compared themselves to evaluate their own performance. Further, social comparison formed the basis upon which individuals construct an internal norm for performance. The study posits that upward comparisons (to a better performer) raise normative expectations of performance while downward comparisons (to a worse performer) lower normative expectations for performance. After hypotheses testing, the study found out that individuals' number of upward comparisons had a conditional indirect effect on performance through engagement and self-efficacy, with learning goal orientation moderating relationships in a learning context, and performance goal moderating relationships in performance context. The study applied quantitative approach only to test the hypotheses hence lacks an understanding of the context in which people behave. The present study employed mixed methods approach so that this weakness was overcome by collecting both numerical data and interviews.

Zell and Strickhouser (2015) carried out a study to investigate the effect of dimensional comparison and social comparison on people's performance. The study examined the interplay between dimensional and social comparison during self-evaluation. This was achieved through experimentation where participants received manipulated feedback indicating that they performed better or worse after self-evaluation on different domains or after social comparison. The result indicated that both types of comparison significantly influenced self-evaluations and affective reactions. Moreover,

the effect of social comparison was significantly stronger than dimensional comparison; hence, social comparison is more impactful in influencing one's performance. The reviewed study arrived at the findings through experimentation; a quantitative technique where participants were subjected to artificial conditions. But the present study obtained the findings through mixed methods technique where participants expressed their feelings through interview in their natural setting as well as numerical data from questionnaires; hence more comprehensive data was obtained.

A case study was done in Malawi by Micari and Drane (2017) to examine the relationship of social-comparison concern, comfort, and self-efficacy to course performance and program persistence in a small-group learning environment. Participants were 205 undergraduates in a peer-led, small-group science learning program. They were surveyed at the beginning and end of the Academic term. Results indicated that social-comparison concern and comfort were unrelated to prior academic preparation as well as to persistence in the program and final grade. The reviewed study employed quantitative approaches and it did not include the qualitative data hence lacked the feelings and opinions of the respondents, but the present study used mixed methods approach to collect both qualitative and quantitative data that had both numerical data and the participants feelings. The target population for the reviewed study was undergraduate students while the present study targeted secondary school teachers.

Social comparison has a role in influencing job satisfaction among teachers (Ofojebe and Chinelo, 2010). This was a finding of a study carried out in Nigeria where teachers' motivation and its influence on quality assurance in the Nigerian education system was discussed. In their study, they compared social comparison theory and equity theory which asserts that a person evaluates his job by comparing his own job experiences with those of others. When a teacher compares his professional experiences such as promotion, remuneration among others, he gets satisfaction or dissatisfaction (Ofojebe and Chinelo, 2010). The reviewed study was carried out in Nigeria but the present study was done in Kenya to enable comparing of the results.

Katreniakova and Cerge (2015) carried out a study in Uganda to examine how social comparison, rewards and incentives motivated students to learn. The study allowed for the social comparison of two types; within and across group comparisons. Here, results suggest no significant difference in the type of comparison provided. The effects of social comparison however become more pronounced once the real rewards are introduced into the social comparison framework, while financial rewards seem to motivate all students, with or without social comparison treatment, to perform better. While the reviewed study targeted students, the target population of the present study was teachers. Also, the analysed study was done in Uganda whereas the present study took place in Kenya.

A study by Aloka and Bojuwoye (2014) found out that in the dynamic interactions among disciplinary panel members during the disciplinary hearing meetings, the members engaged in social comparisons among themselves leading to their shifts in decision making behaviours in favour of consensus in group decisions. 10 participants from 10 selected disciplinary panels were involved. Semi structured interviews were used to collect qualitative data on the experiences of the participants. The reviewed study collected data from a small sample (10 participants) posing the danger of not producing the salient characteristics of the target population to an acceptable rate. To overcome this, the present study increased the sample size. Whereas the reviewed study applied qualitative methods thus missing the quantitative part which gives numerical data, the present study employed mixed methods techniques to collect both qualitative and quantitative data which supported each other.

Social comparison influenced group polarization and it had both advantages and disadvantages (Aloka, 2012). One advantage for instance is that social comparison made group members to compare opinions and arrive at quality decisions. The disadvantage is that some members sought others' approval without seeking credible information required to well informed decisions on students' behaviour problems which might have led to low quality decisions. These were the findings of a study which investigated the influence of social comparison on decision making among disciplinary panels in secondary schools in Kenya. Whereas the reviewed study was limited to disciplinary panels only, the present study covered a wider scope, that is, all the major departments that exist in schools, including all the academic and core curricular departments, thus reducing the sampling error margin. In addition the reviewed study was carried out in Rongo district while the present study took place in Gucha sub-county.

## 2.2 The relationship between Persuasive Arguments and Teachers' Attitudes towards Work:

Persuasive argumentation is a verbal and social activity or reason aimed at increasing or decreasing the acceptability of a controversial stand point for the listener or reader by putting forward a constellation of propositions intended to justify (or refute) the stand point before a rational judge (Galkowski, 2014). When individuals engage in persuasive arguments on a given issue, they freely exchange arguments that are available to them (Zhu, 2009). When an individual hears one or more colleagues' arguments, the individual's thinking is likely to be shifted or realigned towards the arguments of the other colleagues in the group (Aloka and Bojuwoye, 2014). Several studies have been carried out to establish the influence of persuasive arguments on people's attitudes towards work.

A study was carried out in the USA to determine what influences teachers to change their practice. The study came up with the conclusion that the success of persuasion can depend on the kind of attitude someone is trying to change (Webster, 2012). Webster goes on to explain that a cognitively based attitude would most likely to be changed through the central route of persuasion which uses logical arguments while an effectively-based attitude would most likely be changed through the peripheral route of persuasion which uses surface characteristics to trigger mental shortcuts such as emotion. Data was collected using interviews and classroom observation to identify teachers' strategies for managing behaviour. Whereas the reviewed study used the qualitative approach only, hence lacking the quantitative aspect that would produce objective and more accurate numerical results the present study applied mixed methods research technique; concurrent triangulation to collect both qualitative and quantitative data. Mixed methods technique produced more comprehensive data that entailed both numerical information as well as the opinions of the respondents.

Emotional expressions are a powerful source social influence (Van Kleef, Berg and Heerdink, 2015). They carried out a study to examine the interpersonal effects of emotions on persuasion. The study applied 5 experiments. Van Kleef, Berg and Heerdink (2015) found out that more positive attitudes were developed about various topics after participants had seen a source's sad (rather than happy) expressions when topics were negatively framed. Conversely, participants reported more positive attitudes after seeing happy (rather than sad) expressions when topics were positively framed. The study concluded that a person can use the emotional expressions of another person as information when forming their own attitudes. This study arrived at its findings using quantitative techniques; experimental design where participants were subjected to an artificial laboratory environment to yield laboratory results. On the other hand, the present study adopted the mixed methods research techniques, where both numerical data and the opinions of respondents are produced and they supported each other.

Anghelache (2014) carried out a study to determine the role of persuasive messages in determining teachers' attitude towards teaching. The study determined the teachers' degree of resistance to work and the constancy of their attitude to work. Various quantitative methods were used including mean calculation for the variable attitude towards work, factorial analysis to establish the factorial validity of the scale and Cronbach alpha to determine validity of the questionnaires. The results found out that if the subjects have an initial anti-work attitude, a persuasive counter attitudinal message will lead immediately to a significant increase in the pro-work attitude. The reviewed study arrived at the results using quantitative techniques which were narrow as they would only give numerical data without allowing participants to elaborately narrate their own feelings and experiences. However, the present study used the mixed methods approach which gave both numerical data and the participants' opinions, thus both methods complemented each other.

Another study by Bresnahan (2013) examined the persuasive arguments explanation of group polarization and the risky shift phenomenon. Fourteen undergraduate students (7 female, 7 male) were given a questionnaire with two choice dilemmas. Participants were further divided into two male and female groups, consisting of 3 and 4 participants respectively. After the choice dilemmas were rated again, means for both the individual and group conditions were calculated. Results indicated risky shift conditions in the smaller 3-subject groups and cautious shifts in the 4-person subject group, while the individual condition produced a neutralization effect on choice shifts. The study concluded that in group discussion context, a greater emphasis is placed on the quality of the novel persuasive arguments, rather than the mere quantity of novel persuasive arguments, while in the larger subject group discussion context, a greater emphasis is placed on the quantity of the novel persuasive arguments, rather than the quality of novel persuasive arguments. Whereas this study applied quantitative techniques of experimentation where participants were treated in an unnatural environment, the present study applied mixed methods research techniques, so that both qualitative and quantitative techniques support one another. In addition, the participants of the reviewed study were undergraduate students while those of the present study were teachers.

Penczynski (2010) asserts that individuals give up their initial decisions when confronted with more sophisticated arguments and maintain their initial decision otherwise. The study obtained and analysed data through an experiment involving electronics communication within two team players. In the experiment, 2 participants play as one team and communicate electronically as follows: first both players individually suggest a decision and justify it in a written message. Next, after the simultaneous exchange of suggestion and message, the team partners decide individually on the action they want the team to take. One of the two final decisions is randomly implemented as the team's action. Hence with a probability of 0.5 the partner, not the team player herself determines the team's action. This study adopted only quantitative techniques of experimentation to obtain a superficial data set and lacking the qualitative aspect where the participants would give their own opinions, but the present study used mixed methods research techniques to collect both qualitative and quantitative data.

Swol (2009) did an experiment to determine how persuasive arguments would lead to group polarization. The study divided the participants into three-person groups and they were made to discuss an issue. Participants were then rated on a 1-9 scale. Results indicated the following: Group members who used more extreme ends of the scale to rate their opinions talked more and took more turns; groups did polarise on their consensual opinion from the mean of individuals' pre-group opinions; Groups containing a more extreme member did not polarise more than groups not containing an extreme member and finally no difference in polarization were found between groups in which members were in consensus before coming into the discussion and groups containing minority and majority opinions. The reviewed study used a quantitative approach to arrive at the findings which yielded narrower and superficial data since they lacked the detailed expression of the participants' feelings and opinions. But the present study made use of the mixed methods approach which yielded more detailed and comprehensive data that was both numerical and narrative.

A study was done by Brady and Bavel (2018) to determine persuasion as a motivational factor influencing attitude change. 145 participants were sampled and randomly assigned into groups based on high and low relevance, strong and weak argument and high source and low source expertise. The participants were subjected to different types of information from different sources. Results showed a main effect on argument quality where strong arguments lead to greater agreement with the message than weak arguments. There was also a main effect of source where there was a greater agreement with the message when the source had high expertise than when the source had low expertise. Further, there was an interaction effect where when participants were in a high relevance group, the effect on argument quality was stronger than when the participants were in a low relevance group. However for the source condition, when participants were in the low relevance group, the effect of high source expertise was greater than when the participants were in the high relevance group. The reviewed study made use of a quantitative approach which did not reflect how the participants really felt about the messages and the conditions they were subjected to. The present study used a mixed methods approach so that the weaknesses of quantitative technique could be overcome by the qualitative approach.

Mercier and Landermore (2012) did an experiment that came up with a theory of reasoning which makes formerly observed patterns more coherent. According to the theory, individual reasoning mechanisms work best to produce and evaluate arguments during deliberation. Next, when diverse opinions are discussed, group reasoning will outperform individual reasoning. Besides, individuals have a strong confirmation bias when people reason either alone or with like-minded peers and this leads them to reinforce their initial attitudes, thus explaining individual and group polarization. Therefore the failures of reasoning are most likely to be remedied at the collective than at the individual level. The study used a quantitative approach of experimentation only to arrive at the results. This was only aimed at finding one consistent truth. The present study, however, used a mixed methods approach where qualitative data focused on finding multiple answers on how persuasion could polarize the attitude of teachers.

A study by Gabbay, Kelly, Reed and Gastil (2017) gives a novel explanation of group polarization effect whereby discussion induces shifts to the extreme. In the experiment, the study used 2 mathematical models: a simple rhetorically approximate majority model and the accept-shift-constrict model of opinion dynamics. These models were made to produce shifts to the extreme without the typical modelling assumption of greater resistance to persuasion among extremists. The study found out that rhetorically induced asymmetry preferentially facilitates majority formation among extreme group members thereby skewing consensus outcomes further in the extreme direction. Another finding was that heuristic substitution can shift the effective reference point for discussion from the policy reference yielding differential polarization by policy side. The reviewed study applied quantitative methods of experimentation which only yielded

narrow laboratory results hence lacking the elaborate details of the participants' feelings. But the present study employed mixed methods technique which yielded both numerical data and the participants' views which supported each other.

A study was done by Esterling, Fung and Lee (2013) to evaluate the dynamics of small group persuasion within a large scale randomised deliberative experiments. The study sought to find out whether persuasion in this context is driven by ideological composition of the small group to which participants were randomly assigned. The results indicated that persuasion occurred but it was not polarizing. Moreover small group dynamics depend on the context in which the discussion occurs. The reviewed study employed quantitative techniques of experimentation only to determine cause and effect, without observing the participants in their natural contexts. However, the present study used the mixed method approach so that the findings that could not be explained by the questionnaire were explained by the interviews.

A study by Putte, Neijens and Witt (2013) reported that attitude and intention change are best established by cognitive persuasive messages. The study investigated whether the efficacy of affective vs cognitive messages was moderated by: individual subjective assessments of whether their attitudes are based on affect or cognition (meta-bases) and the degree individuals' attitudes were correlated with affect and cognition (structural bases). 97 participants were sampled and exposed to messages containing affective and cognitive messages. Results indicated that: affective (cognitive) messages were judged more positively when individual meta bases were cognitive; structural bases and not meta-bases moderated the influence of argument type on attitude and intention change following the exposure; Change was greater among individuals who read a message that was mismatched their structural base and affective messages were more affective as attitudes were more cognition based. The reviewed study employed quantitative methods of experimentation where participants are studied in their unnatural environment; hence results from the real world were not obtained. The present study however employed mixed methods which not only gave quantitative data but also the opinions of respondents that were expressed in their natural environments.

A study was done in Egypt by Zeitoun (2017) to determine the effect of written persuasive communication on changing the attitudes of Egyptian pre-service Biology teachers to the topic of evolution. Attitude change was measured using a questionnaire with 22-item Likert type scale with 11 positive and 11 negative statements related to evolution. The questionnaire was administered as a pre-test and a post-test to assess attitude change. Participants included 154 volunteers; 48 males and 108 females who were randomly divided into 2 equal treatment groups. The experimental group used persuasive communication consisting of two opposite arguments related to teaching evolution while the control group used written communication about air pollution. The results indicated a significant difference in mean post-test scores between the experimental and control group in favour of the experimental group. Hence teachers who had received the written persuasive communication had a positive change in their attitude towards teaching evolution in secondary schools. The reviewed study used quantitative techniques only to arrive at the results which only provide numerical descriptions and less elaborate accounts of human perceptions and lack a detailed narrative from the respondents. The present study, on the other hand applied mixed methods approach and obtained both numerical data and the feelings of the participants. The reviewed study also sampled the participants through simple random sampling in a heterogeneous population leading to lack of balanced representation. But the present study employed stratified sampling to represent all the characteristic of the study population.

A study was carried out in Libya by Alssageer and Kowalski (2013) to examine the perceptions of Libyan Doctors regarding the benefits, ethical issues and influences of their interactions with pharmaceutical company representatives. The study found out that persuasive communication can generate a positive attitude and increase the potential for influence. The reviewed study's focus was on Doctors attitudes towards medical products while the present study focused on teachers' attitudes towards work. Further, the study was carried out in Libya while the present study took place in Kenya.

According to Mosler (2015), persuasive arguments can be used as a behaviour change strategy to change one's perception of a situation. This were findings arrived at after case studies in Zimbabwe, Ethiopia and Uganda, which were used to show the effects of different strategies that were used to achieve behaviour changes. Whereas this study applied qualitative techniques of case studies thus lacking numerical data that would be used for generalization of the results, the present study applied mixed methods research techniques so that both qualitative and quantitative approaches complement each other.

According to Aloka and Bojuwoye (2014), persuasive arguments among panel members during the disciplinary hearing deliberations influenced the panel members to make good quality decisions. The study applied a qualitative approach, where phenomenology design was used. The population of the study involved all Kenyan secondary schools with behaviour management practices. 10 schools were selected as follows: coeducational (n=5), boys only (n=3), girls only (n=2). This study also collected data using interview protocols to obtain qualitative data that could be subjective and would not be easily generalizable. The present study on the other hand employed mixed methods technique where quantitative data that would be generalised was produced as well as qualitative data that gave a detailed narrative of the respondents' perspective was produced. Moreover, the focus of the reviewed study was on disciplinary members only unlike the present study which included all teachers. A large sample size in this case reduced the sampling error margin.

### 3. RESEARCH METHODOLOGY

#### 3.1 Research Design:

The study used mixed methods research approach specifically the concurrent triangulation design. The mixed methods technique involved collecting, analyzing and interpreting both qualitative and quantitative data. The approach had its advantages: it enabled the researcher to answer the questions that could not be adequately addressed by either quantitative or qualitative methods only (Creswell 2003). When using the concurrent triangulation design, both methods are used to overcome a weakness in using one method with the strength of another (Creswell 2003). Mixed methods approach further produces data that is more comprehensive because it can include numbers, statistics words and narrative. Qualitative data was collected using interview schedules while quantitative data was collected using questionnaires. Interview schedules were used to collect data from Deputy Principals and the SCQASO who gave expert opinions on teachers' attitudes and how group polarization would be influencing them. Questionnaires on the other hand were used to collect quantitative or numerical data from teachers. Figure 3.1 illustrates the concurrent triangulation design.

#### 3.2 Area of Study:

The study was carried out in secondary schools of Gucha sub-county. The sub county covers an area of 106.30 Km<sup>2</sup>. It lies 0.799<sup>0</sup> South and of 34.72<sup>0</sup> East. It has a population of 93,530 people. Gucha sub county is bordered by Nyamache sub-county (at the East), Kenyena sub-county (at the South), Nyamarambe sub county (at the West), and Sameta sub county (at the North). There were 21 secondary schools, 41 primary public primary schools and several private primary schools, one youth polytechnic and 1 constituent campus of Kisii University. The economic activities in this sub county include farming, livestock husbandry and business. The sub county was selected for this study because of several reasons which include the poor performance of students in KCSE examinations and co-curricular activities, high rate of students migration from one school to another, high levels of indiscipline among students among other reasons which could be a clear indication that the attitudes of teachers towards their work is questionable. There is also a lot of laxity among teachers when it comes to their response to the call of duty and this has necessitated research into the causes of such negative attitudes that are expressed by the teachers.

#### 3.3 The study Population:

Population refers to an entire group of individuals, events, or objects having common observable characteristics (Mugenda and Mugenda, 2003). The target population for this study included teachers and the Deputy Principals of secondary schools in Gucha sub-county and a SCQASO. There are 20 secondary schools with 278 teachers, 21 Deputy Principals and the SCQASO.

#### 3.4 Sample size and Sampling techniques:

A sample is a small proportion of the study population (Orodho, 2002). A large sample would be better since a small sample has the danger of not producing the salient characteristics of the accessible population to an acceptable degree (Mugenda and Mugenda, 2003). Kothari (2004) recommends a reasonable sample to be between 10 to 30%. According to Orodho (2002), the larger the sample, the smaller the sampling error. Therefore, teachers from 30% of the schools in Guchasub county were sampled to participate in the study. Moreover, the deputy principals of all the selected schools were respondents as well as the SCQASO. The sample constituted 77 teachers, 7 Deputy Principals and the SCQASO. Stratified random and purposive sampling techniques were used in the study.

### 3.5 Research instruments:

The present study collected data using questionnaires and interview schedules.

### 3.6 Validity of research instruments:

Validity is the degree to which results obtained from the analysis of data actually represent the phenomenon under study (Mugenda and Mugenda, 2003). The validity of the questionnaires of the present study was assessed in terms of content validity, face validity and criterion related validity. Content validity is the degree to which a research instrument measures the phenomenon it is meant to measure. Face validity is the degree to which a research instruments appears to measure what it is supposed to measure. Criterion related validity refers to the use of the measure to assess or predict the subjects' behaviours in a specific situation (Mugenda and Mugenda, 2003). Validity of the questionnaires was established by the researcher's supervisors.

### 3.7 Reliability of research instruments:

Kothari (2004) defines reliability as a measure of the degree to which a research instrument yields consistent results after repeated trials. It involves administering the same instrument a number of times to the same group of subjects. The techniques of testing reliability include the equivalent form technique, split half, test retest and internal consistency techniques (Mugenda and Mugenda 2003).

In the present study, the split half technique was used to ascertain the reliability of the questionnaires. In this case the questionnaire items were split into two equal parts and filled in by the same respondents. 14 participants were involved. Subject scores from one part were correlated with scores from the second part using Pearson correlation to establish the consistency of the scores. The results in table 3.1 were obtained:

**Table 3.1: Split half reliability testing output**

		HALF1	HALF2
HALF1	Pearson Correlation	1	.779**
	Sig. (2-tailed)		.001
	N	14	14
HALF2	Pearson Correlation	.779**	1
	Sig. (2-tailed)	.001	
	N	14	14

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Reliability of the questionnaires was calculated using Spearman Brown Formula:

$$r_{full} = \frac{2 \times r_{1/2}}{1 + r_{1/2}}$$

$$r_{full} = \frac{2 \times 0.779}{1 + 0.779}$$

$$r_{full} = \frac{1.558}{1.779}$$

$$r_{full} = 0.876$$

Kothari (2004) recommended that reliable questionnaires should possess a reliability coefficient of 0.6 and above. Therefore a very high reliability coefficient ( $r = 0.876$ ) was obtained indicating very high consistence in measuring the reliability of the questionnaires.

**3.8 Trustworthiness of Qualitative Data:**

The concepts of validity and reliability are relatively foreign in the field of qualitative research (De Vault, 2017). This is because qualitative researchers do not use instruments with established metrics about validity and reliability, hence, it was pertinent to address how qualitative researchers establish that the research findings. Through the paradigm of credibility, dependability, confirmability and transferability, the trustworthiness of qualitative data was ascertained (Olivia, 2016).

**3.9 Data collection procedures:**

Before taking the questionnaires to the respondents, the present researcher obtained a letter from the researcher’s University, Jaramogi Oginga Odinga University of Science and Technology(JOOUST) authorizing her to do research. Next, the researcher obtained a research permit from the National Commission of Science Technology and Innovation (NACOSTI) and an authority letter from Kisii County Director of Education. Finally the researcher wrote a letter to the schools that had been sampled for the study asking for permission to collect data from the teachers. These are legal documents that allowed the researcher to carry out research in Gucha Sub-county.

**3.10 Data Analysis:**

**3.10.1 Quantitative data analysis:**

After data collection, the questionnaires were coded and scores entered. Data that had been obtained was keyed into the SPSS software for analysis according to the objectives of the study. Scores for attitude towards work questionnaire were also entered for the purpose of correlating them with the scores of the independent variables. Data was analyzed by both descriptive and inferential statistics as guided by table 3.2.

**Table 3.2: Quantitative data analysis matrix**

Research hypothesis	Independent variable	Dependent variable	Statistical test
There is no statistically significant relationship between social comparison and attitudes towards work	Social comparison	Attitude towards work	Pearson’s correlation
There’s no statistically significant relationship between persuasive arguments and attitudes towards work	Persuasive arguments	Attitude towards work	Pearson’s correlation
There is no statistically significant relationship between group think and attitudes towards work	Group think	Attitude towards work	Pearson’s correlation

The table shows that in the hypotheses of this study, the independent variables included social comparison, persuasive arguments and group think while the dependent variable was attitudes towards work.

Descriptive statistics was meant to enable the researcher describe the distribution of scores while the purpose of inferential statistics was to test the hypotheses. This was done through correlation analysis using Karl Pearson’s product moment to determine the degree to which the independent variables were related to the dependent variables. Regression analysis was also performed to establish whether the independent variables; social comparison, persuasive arguments and group think, predicted the dependent variable; attitude towards work.

**3.10.2 Qualitative data analysis:**

Qualitative analysis of data refers to non-empirical analysis (Mugenda and Mugenda,2003)Qualitative data collection and analysis took place together. In fact, less data was collected and more data analysis produced as the research progressed (Wiersma and Jurs, 1969). The table 3.3 shows the phases of analyzing qualitative data:

**Table 3.3: Phases of qualitative data analysis**

Phase	Process
Data familiarity	Reading data over and over to familiarize with content depth and breadth and identify meanings and patterns. Includes transcription of verbal data into written form.
Creating initial codes	Create codes to identify themes and patterns. These are the most basic segments of raw data that can be assessed in a meaningful way regarding the phenomenon.

**International Journal of Novel Research in Education and Learning**

 Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

Sorting themes	Sort and combine themes to form overarching themes from the entire set of data.
Reviewing themes	Recombine major themes taking into account the validity and accuracy in reflecting meanings evident in the data set.
Defining/ naming themes	Identifying the essence of each theme and the aspect of data it captures in relation to the research objective for each theme.
Reporting	Final analysis with clear extracts of examples to tell the story of the data convincingly, coherently, logically and without repetition.

Source: Braun and Clarke (2006)

The first phase was data familiarity where the researcher listened to and read the data that had been collected severally for the purpose of familiarising herself with it. (Mugenda andMugenda 2003).Next, initial codes were created to ease identification of meaningful patterns and themes. The researcher then established the relationship between the categories. Themes and categories were generated using codes. The third phase involved sorting and combining minor themes to form comprehensive themes from the entire set of data. The themes were then reviewed to ensure validity and accuracy in reflecting meanings evident in the data set. The next stage involved analyzing ant interpreting information by identifying meaningful patterns and themes and grouping the data collected into them. Data was then analyzed through the thematic framework. After that, the themes were defined or named. The final phase was reporting where there was the final analysis of extracts. It involved conclusion drawing and verification. This final phase was done in combination with quantitative data. Table 3.4 shows some of the extracts obtained, their codes and the themes they represented.

**Table 3.4: Qualitative Data thematic framework**

Interview excerpt	Codes	Themes
Every teacher has a duty to perform better, so every time we discover that we have not done better than the others we want to find out what made these teachers do better than us. So when we discover what they did, we also try to do the same such that next time we can catch up with them or even do better than them.	COMP 1	Upward social comparison
If an argument is based on facts, it enables us to see how things should have been done. When a teacher is taken through an issue in a logical or rational manner, he is able to seeanother perspective which he did not initially have in mind. Logical arguments are good. In fact you become more reasonable in the way you perform your duties. (D/P 2)	LOGIC	The Logos of an Argument
There are some factors in our school that make teachers feel intimidated, for instance, forcing them to beat deadlines when they are working or making a decision, tasks that are supposed to be completed within a specific time may make teachers to regroup and think that the administration is oppressing them, and this is where opposition comes. This has sometimes caused anarchy in most institutions because this is where teachers reunite even if they may know that they are wrong. (D/P1)	FAULTS	Group think organizational structural faults

Source: Researcher (2018)

### 3.11 Ethical considerations:

Ethics is a branch of philosophy which deals with one's conduct and serves as a guide to one's behavior (Mugenda and Mugenda, 2003). Ethical issues are dilemmas or conflicts that arise due to improper way of doing research.

The researcher sought authority to collect data from the following- a letter of Authority to do research from Jaramogi Oginga Odinga University of Science and Technology Board of Post-graduates; a letter of authority to do research from NACOSTI, a research permit from NACOSTI and a research authorization letter from the Director of Education Kisii County. Having obtained the research authorization documents, informed consent of the participants was sought where the researcher disclosed the purpose of the study, which was: to explore group polarization as a determinant of attitude towards work among teachers. In addition, confidentiality privacy and anonymity of the subjects was upheld by the present researcher. The respondents were assured that the information they gave would be confidential and would not be

revealed to the public, unless they gave consent. Names not required on the questionnaires as they had been labeled using serial numbers. This was intensified by safely keeping the questionnaires and the audio responses out of reach of any other person but the researcher.

#### 4. RESULTS AND DISCUSSION

##### 4.1 Results and Discussion of the study on the relationship between Social Comparison and Attitudes-towards-work among teachers:

###### 4.1.1 Social Comparison among teachers:

Social comparison is a situation where teachers evaluate themselves in relation to other teachers in terms of their abilities, opinions or achievements. In this case teachers may engage in upward or downward social comparison. Upward social comparison happens when one evaluates himself with a superior other while downward comparison is when one compares their abilities, opinions or achievements with those of inferior others. The study sought to determine whether teachers did undergo social comparisons and hence establish whether they went through upward comparisons or downward comparisons. The study went ahead to establish whether teachers made cautious or risky attitude shifts after these comparisons. Respondents were requested to score on the Likert scale their responses on social comparison items as shown in Table 4.1

**Table 4.1: Response to social comparison items**

Statement	Frequency					T F	TS	Av. S	%
	SD	D	N	A	SA				
I often compare myself with others with respect to what i have accomplished in the teaching profession	3 4.2%	5 7%	13 18.3%	36 50.7%	5 7%	71	288	4.5	90
If i want to learn more about something i try to find out what others who i believe are better placed think about it	4 5.6%	7 9.9%	8 11.3%	29 40.8%	23 32.4%	71	273	3.9	78
I always pay attention to how i perform my duties compared to how teachers who attain better results perform theirs	2 2.8%	10 14.1%	13 18.3%	11 15.5%	35 49.3%	71	280	3.9	78
If i want to know how well i have thought, I compare my performance with that of teachers who have achieved better grades	8 11.3%	8 11.3%	13 18.3%	14 19.7	40 56.3%	71	319	4.5	90
I work more effectively when i know i have not achieved better results than those of other teachers	6 8.5%	6 8.5%	8 11.3%	20 28.2%	31 43.7%	71	277	3.9	78
I always want to know what the other teachers in a similar situation to mine would do to achieve good results	4 5.6%	10 14.1%	14 19.7%	21 29.6	22 31%	71	260	3.7	74
If i want to find out how well i have done my duties, i compare my performance with teachers in a similar situation as mine	4 5.6%	9 12.7%	12 16.9%	17 23.9%	29 40.8	71	271	3.8	76
I learn more when i compare my achievement with that of teachers who have not achieved what i have	7 9.8%	33 46.4%	14 19.7%	14 19.7%	3 4.2%	71	186	2.6	52
I work more effectively when i know i am better placed than other teachers	5 6.9%	24 33.3%	15 20.8%	19 26.4%	8 11.1%	71	214	3.1	62
Looking at my colleagues attitude makes me feel like they are more comfortable in the teaching profession	2 2.8%	10 14.1%	15 21.1%	17 23.9%	27 38%	71	253	3.6	72
I feel pressure to improve how i perform my duties after seeing how my colleagues perform theirs		6 8.5%	11 15.5%	14 19.7%	40 56.3%	71	301	4.2	84

I am not the kind of person who compares often with others	5 6.9%	8 11.1%	15 20.8%	19 26.4%	24 33.3%	71	262	3.7	74
When i see how my colleagues perform their duties, i get satisfied with what i have achieved	5 7%	7 9.9%	11 15.5%	14 19.7	30 42.3%	71	274	3.9	78
I never consider my situation relative to that of other teachers	4 5.6%	35 49.3%	1 1.4%	15 21.1%	16 22.5%	71	217	3.1	62
My satisfaction with my achievement reduces after comparing it with that of other teachers	1 1.4%	8 11.3%	9 12.7%	40 56.3	13 18.3	71	269	3.8	76
Total								3.7	74

It is evident on Table 4.1 that teachers engaged in social comparisons amongst themselves where 57% of the respondents confirmed that they compared with other teachers in relation to what they had achieved in the teaching profession. Generally, the teachers got an average score of 4.5(90%) which indicates that they strongly agreed with the statement. These findings are supported by Downes (2015) who reported that interactions with higher performing colleagues and lower performing colleagues provides referents against which people compare themselves to evaluate their own performance. It also agrees with Ofojebe and Chinelo (2010) who reported that social comparison had a role in influencing job satisfaction among teachers. Contrary to this, Zell and Strickhouser (2015) advocated for dimensional comparison where an individual could evaluate his own performance in various dimensions before engaging in social comparison.

During interviews, respondents were asked whether they compared themselves with other teachers. They agreed and added that such comparisons would make a teacher learn from his comparison target and hence use whatever he had learned to perform his duties, as seen in the following excerpts;

*I would like to compare my performance with a better teacher or one who performs better. Even the other teachers like to compare themselves like that because this can make you learn something from him. (D/P5)*

This was supported by another respondent who said;

*Every teacher has a duty to perform better, so every time we discover that we have not done better than the others we want to find out what made these teachers do better than us. So when we discover what they did, we also try to do the same such that next time we can catch up with them or even do better than them. (D/P 1)*

From this extracts it is clear that teachers evaluated their performance and achievement in relation to that of the other teachers. They compared themselves with other teachers so that they would find out what made the comparison target better than them, they would implement whatever they learnt so that they would catch up with the teachers they considered better than them. Similarly, a study by Bresnahan (2013) revealed that when a teacher compares his professional experiences with others, he gets satisfaction or dissatisfaction.

According to the findings of this study, a greater percentage of teachers engaged in upward comparisons. Cumulatively 64.8 % agreed that they always paid attention to how they performed their duties compared to how teachers who attained better grades performed theirs. They obtained an average score of 3.9 (78%) meaning that they generally agreed with the statement. 54(76%) of the respondents also agreed that if they wanted to know how well they had taught, they compared their performance with that of teachers who had achieved better grades. In general, the respondents got a mean score of 4.5(90%) which means they strongly agreed. Moreover, 29(40.8%) of the respondents agreed and 23 (32.4%) agreed strongly that for them to learn more about something, they tried to find out what others thought about it. The respondents got an average score of 3.9(78%) meaning they agreed with the statement. The findings of this study are similar to those of a study by Kitchel, Smith, Henry, Robinson, Lawver, Park and Shell (2012) that teachers tended to engage in upward comparisons leading to inspirational emotional outcomes. Giggasari and Hassaskha (2017) also found out that upward comparison tendency showed a positive effect on teachers' sense of instructional efficacy. On the contrary, Rahimi (2014) reported that downward comparisons positively predicted job satisfaction

**International Journal of Novel Research in Education and Learning**

 Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

Interviews were carried out where respondents were propped on upward comparison. From the responses the study found out that teachers engaged in upward social comparison. This is because they felt that they would get something to learn or copy from a superior other;

*Teachers compare themselves with better teachers and they copy positive traits towards improving their performance in their subject areas. If teachers copy and implement what teachers in a good school do, definitely their performance will go up. Such comparison can influence teachers' attitude towards work positively if it is taken in a positive way.*(SCQASO)

These sentiments were echoed by another interviewee who said;

*A teacher can compare with another teacher who he believes is superior to him and this comparison can influence a teacher's attitude in two ways: it can positively influence the teacher to yearn to perform better if provided with all that the superior teachers have. But if the provisions are not given it can break the teachers' morale because they feel that they are not on a level ground with the superior teacher.* (D/P 2)

This excerpt indicates that teachers would undergo upward comparison and it would make them perform their duties better. In this case teachers would compare themselves with those who they believed were better performers or taught in better schools and then they tried to implement what they learnt, hence improving their attitude towards work. From the excerpts the study further established that the teachers who engaged in upward comparisons would perform better, like their comparison targets if provided with an enabling environment similar to that of their comparison targets.

According to the findings of this study, teachers who engaged in upward comparisons made more cautious attitude shifts. This is evident from the table whereby cumulatively more than a half 51(71.9%) of the respondents agreed that they would work more effectively when they knew they had not achieved better results than those of other teachers. Here the participants got an average score of 3.9(78%) meaning that they generally agreed. At the same time, the study established that cumulatively, three quarters, 54(76%) of the respondents felt pressure to improve how they performed their duties after seeing how their colleagues performed theirs. In general they obtained an average score of 4.2(84%) which means they agreed with the statement. Further, a good number of respondents 53(74.6%) got less satisfied after realising that there were individuals who had achieved more than them, where they averaged scored 3.8(76%), hence they generally agreed with the statement. These findings are similar to those of Utz and Muscanell (2018) who reported that people who were exposed to their personal achievements against the achievement of others showed a motivation to work harder. A similar study by Yperen, Brenninkmeijer and Buunk (2017) found out that exposure to a superior colleague generated more positive effect among teachers than exposure to an inferior other.

During interviews respondents indicated that they would engage in upward comparison and this would make them strive hard to achieve what their comparison targets had achieved,

*"Teachers do compare themselves with other teachers. They will of course watch a better teacher to see what makes him better than them. Then they will learn from the superior teacher.* (SCQASO)

Similar remarks were given thus;

*In most cases we do compare ourselves with teachers who have performed better than us. Here we ask ourselves, what is this that makes them perform better? Then we learn from them and strive hard so that we perform better too.* ( D/P2)

And another one commented;

*"... this makes teachers to strive hard to compete with superior teachers because they feel, in fact, hurt when they perform poorly, so upward comparison makes them to work hard to reach the others. So the attitude of the teachers goes up,"* (D/P 4).

According to another respondent, upward comparison, *"In most cases it brings about a desire or a motivation to us to also work to reach the others. When we see others performing better we feel that we can also work to attain that"* (D/P 6).

From these excerpts, it is clear that upward comparison motivated the teachers to strive hard to achieve what the superior others had achieved. They tried to find out what the superior teacher did such that they would apply similar strategies in their work in order to perform better. This means that their attitude became more positive. According to D/P4, when one

**International Journal of Novel Research in Education and Learning**

 Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

gets 'hurt' after receiving poor results, he will get a lot of pressure to improve and avoid being 'hurt' in future. Therefore, upward social comparison had a positive influence on the teachers' attitude towards work. Similarly, Downes (2015) reported that upward comparison to better performers raised normative expectations of performance.

The study found out that majority of the respondents confirmed that they could not compare themselves with teachers who they thought were inferior to them or those who they felt had not achieved much. From the table, cumulatively 40(56.2%) disagreed that if they wanted to learn more about something they compared their achievement with that of teachers who had not achieved what they had. In general, they averagely scored 2.6(52%) which means they were undecided. These findings were supported by Tenbrook (2016) who found out that upward comparison targets were chosen and evaluated more highly than downward comparison targets. This is contrary to Wehmeyer (2013) who reported that when individuals compare themselves with worse offs or the less competent colleagues, it boosts their own well-being.

During interviews, respondents indicated that they would not engage in downward comparison because they felt that they could benefit from such comparison. This is seen in the following excerpts

*In most cases, teachers don't compare themselves with inferior teachers but if it happens it makes the teachers feel that they are higher. They look down upon inferior teachers. Such kind of comparison can be very dangerous because you feel you are the best, so you feel proud and pride comes before a fall. (D/P 3)*

This was supported by the SCQASO's remarks;

*It is not easy for a teacher to compare himself with a teacher who is performing poorer than him because he feels there is nothing to learn from a poor performing teacher. The attitude of the performing teacher definitely becomes very negative.(SCQASO)*

These remarks clearly suggest that downward social comparison rarely took place because respondents felt that the inferior targets had nothing to offer and inferior targets are looked down upon. They felt that there is nothing to learn from a teacher who does not perform well. From these responses, the study established that downward comparison made teachers feel proud of their achievement and such pride would affect their performance negatively. This view is supported by Utz and Muscanell (2018) that downward comparison brings about pride.

The study established that downward social comparison made teachers have risky attitude shifts. Teachers who knew that they were better than other teachers confirmed that the situation made them not work effectively where cumulatively, 29(40.2) disagreed while 15 (20.8%) were undecided. In general they scored 3.1(62%) meaning they were undecided on the statement. At the same time, 44 (62%) of the respondents got satisfied with their achievement after seeing how their colleagues performed their duties, and what they had achieved in the profession. Here they averagely scored 3.9(78%) meaning that they generally got satisfied with their achievement after downward comparison. Similarly, a study by Giggasari and Hassaskha (2017) found out a positive significant relationship between downward comparison and burnout and depersonalization among teachers. On the contrary, Rahimi, Hall, Wang and Maymon (2017), found out that downward comparison with worse-offs positively predicted job satisfaction and anger among teachers.

Interview respondents concurred with these findings. They indicated that after engaging in downward comparison, they did not improve or strive to better the way they performed their duties because they felt they were better off. This is as in the extracts that follow;

*When we compare ourselves with those who are not performing better only motivates us that what we are doing is right but it may not push us to move an extra mile for further improvement but there is that motivation that what we are doing is right. You just maintain what you are doing. (D/P5)*

Similar comments were given as follows;

*Comparing ourselves with teachers who perform worse may make us have a superior attitude towards work and feel that we cannot compare with an inferior teacher because he has nothing to provide. However it may not make the teacher to have a poor attitude. He will work but will feel superior to others. (D/P 1)*

International Journal of Novel Research in Education and Learning

Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

These excerpts clearly indicated that as much as some teachers would undergo downward comparison, it did not motivate them work harder. They got satisfied with their achievement because those they compared with were worse off in terms of performance. The only motivation they got was that they were on the right track. They did not go an extra mile to improve but rather worked just to maintain their position.

On the other hand, one of the respondents was of the view that downward comparison was a motivating factor to teachers. This is in line with Wehmeyer (2013) who revealed that downward comparison made individuals feel better about themselves and it was very comforting, though not a long-term solution.

*...such comparison actually motivates a teacher. When you realize that you are the best you just try to maintain your position. You even go an extra mile teaching and even working for extra hours to maintain your position. The attitude becomes more positive. (D/P 4)*

In other words, after undergoing downward comparison, one could realize that he is the best and to maintain that, the teacher would work harder, teach for extra hours so that he remains the best, thus would improve the teachers' attitude towards their work.

The study therefore found out that upward social comparison generally boosted the teachers' attitude towards work while downward social comparison hindered the attitude. It is clear that after undergoing upward social comparison, teachers learnt new ideas from their comparison targets which they would implement in the way they performed their duties; hence they would work more effectively. But, after engaging in downward comparison, teachers only tried their best to maintain what they had achieved but did not add value to it. They just wanted to maintain their position of being better than the rest, thus they just maintained the attitude they had. To find out the relationship between social comparison and attitude towards work among teachers, the study went ahead to determine the attitude of teachers.

**4.1.2 Attitude towards work among teachers:**

Attitude towards work refers to a teacher's feeling about his work and his approach towards the same. To establish whether the attitude was positive or negative, the respondents were presented with several Likert items to which they were requested to score as in Table 4.2.

**Table 4.2: Response to Attitude towards work items**

Statement	Frequency					TF	TS	AS	%S
	SD	D	U	A	SA				
As far as i know, I plan to be working in this school next year	10 14.1%	5 7.0%	12 16.9%	33 46.5%	11 15.5%	71	243	3.4	68
I am satisfied with the amount of job security i have	8 11.3%	21 29.6%	9 12.7%	26 36.6%	7 9.9%	71	216	3.0	60
I am satisfied with the respect i receive from the people i work with	4 5.6%	8 11.3%	12 16.9%	38 53.5%	9 12.7%	71	253	3.5	70
I have confidence and trust in my colleagues	3 4.2%	5 7.0%	11 15.5%	44 62.0%	8 11.3%	71	262	3.6	72
In general, i like working here	12 16.9%	8 11.3%	13 18.3%	31 43.7%	7 9.9%	71	226	3.1	62
What happens to my staff is really important to me	4 5.6%	11 15.5%		40 56.3%	16 22.5%	71	266	3.7	74
I work hard in my job as a teacher	3 4.2%	1 1.4%	29 40.8%	36 50.7%	1 1.4%	71	241	3.4	68
The work i do is important to my staff	1 1.4%	3 4.2%	3 4.2%	43 60.6%	21 29.6%	71	293	4.1	82
My work is generally interesting	6 8.5%	5 7.0%	10 14.1%	33 46.5%	17 23.9%	71	263	3.7	74

**International Journal of Novel Research in Education and Learning**

 Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

I understand the performance appraisal system being used in the teaching profession	7 9.9%	9 12.7%	15 21.1%	27 38.0%	13 18.3%	71	243	3.4	68
My workload in this school is increasing	2 2.8%	20 28.2%	12 16.9%	27 38.0%	10 14.1%	71	236	3.3	66
My job description accurately describes my job	3 4.2%	10 14.1%	11 15.5%	40 56.3%	7 9.9%	71	251	3.5	70
I am allowed time for training and professional development such as attending workshops	10 14.1	15 21.1%	12 16.9	29 40.8%	5 7.0%	71	217	3.0	60
I have the necessary teaching/ learning materials and equipment	4 5.6%	18 25.4%	12 16.9%	31 43.7%	6 8.5%	71	230	3.2	64
In this school there are sufficient opportunities to advance	10 14.1%	18 25.4%	16 22.5%	24 33.8%	3 4.2%	71	205	2.8	56
My principal promotes a work environment where all teachers feel included	6 8.5%	21 29.6%	15 21.1%	23 32.4%	6 8.5%	71	215	3.0	60
Total								3.35	67

The study sought to determine whether teachers were satisfied in their various work stations. They were asked whether they were ready to remain in their schools the following year. Here, they got an average score of 3.4(68%) which means that teachers were undecided whether to remain in their current stations or not. Cumulatively, 44(62%) agreed with the statement. They were propped with the statement, "In general, I like working here" and about a half 38 (53.6%) of the teachers agreed. The findings agree with those of a study by Mosomi (2015) who reported that lack of enabling environments affected teachers' attitudes towards the performance of duties. These findings are again supported by Orji and Enyiamaka (2018) who found out a positive relationship between teachers' attitude and their work environment and physical working conditions.

During interviews, respondents indicated that teachers enjoyed working in their various stations but they would complain or raise issues which would not be solved at the end;

*Teachers enjoy their work though not whole heartedly. They are committed and they strive hard to complete the syllabus in time. Most of them are here by 7 and leave by 5. But when a teacher complains and raises an issue, maybe he doesn't have this or that, and nobody is listening, he will work, yes because he was employed to work but not whole heartedly( D/P1)*

From the extract, the study found out that, teachers liked their work. However the environment and the circumstances under which they worked suggested that they were not happy with their various schools, hence, most teachers were not decided whether to continue staying in their schools or not.

The study further sought to know how teachers interrelated and found out that the respondents were not only satisfied with the respect they received from their colleagues but also the confidence and trust they had in their colleagues, which is evident from their response where more than a half 47(66.2%) agreed that they were satisfied with the respect they received and 52(73.3%) agreed that they had confidence and trust in their colleagues. Averagely, the respondents scored 3.5(70%) and 3.6(72%) respectively, meaning they generally agreed with the statement. In addition, cumulatively, 56(78.8%) agreed that what happened to the staff was really important to them, where they averagely scored 3.7(74%) meaning that they generally agreed. At the same time, the respondents generally agreed that the work they did was important to their staff where they scored 4.1(82%). This cordial relationship might have been the reason why a good number of the teachers liked to work in their stations. Similarly, a study by Orji and Enyiamaka (2018) revealed that the interpersonal relationships and the physical working environment determined teachers' commitment level. This is supported by Rani (2013) who revealed that good interpersonal relationships impact positively on the attitude of teachers.

Besides, during interviews, one respondent indicated that when teachers related well, they worked better. Good interpersonal relations among teachers boosted their attitude because this would motivate them to do teamwork and accomplish activities effectively.

## International Journal of Novel Research in Education and Learning

Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

*Teachers in this school like their work... they cooperate, for instance giving someone an assignment and they do it together, it means they like the work. When deadlines have been set, they assist each other, they meet them without much problem. They attend their lessons well, I have not had a lot of strife with teachers. However, there are few cases we are discussing here and there concerning doing their work. (D/P 2)*

This excerpt indicates co-operation among teachers, though suggests that there could be a few cases that may not be co-operative, which questions their attitudes. When teachers relate well, their attitudes could be boosted in either way. Good interpersonal relationships create a favourable work environment.

Another finding by this study was that less than a half 32(46.5) of the respondents agreed that they were satisfied with their job security. Their mean score here was 3.0(60%), a clear indication that teachers were not sure of their job security. At the same time, teachers did not really understand their appraisal system, where they scored 3.4(68%) showing the extent to which they do not understand. This means that though the teachers were ready to work, if their job security is not assured, their attitude had to reduce. The findings were in agreement with those of Mosomi (2015) who noted that job satisfaction plays a key role on how teachers perform their duties. The findings are supported by Isaiah and Nenty (2012) who reported that lack of job satisfaction among teachers had contributed significantly to their inability to attain their educational goals. Contrary to this, Ochiewo (2016) found an insignificant relationship between teachers' attitude and their commitment to service.

During interviews, one of the respondents hinted that some teachers were considered 'troublesome' by the administration, *"...but in this school, we decide who will do this and who will do that because some people are so troublesome"* (D/P 1). The SCQASO too revealed that, *" the Principals put their 'friends' in the departmental offices to eat"*

This means that if a teacher is 'troublesome' or is 'not a friend' to the administration, their job security may not be assured, which may demoralize the teachers. Furthermore, if a teacher does not understand the appraisal system properly, he may not know what may happen to his job next, hence poor attitudes may be expressed.

In addition, the study revealed that only about a half of the teachers, 37(52.2%) were provided with the necessary teaching/ learning materials while the rest were not. Similar findings were reported in Gucha by Abobo (2017) that teachers lacked adequate teaching and learning facilities to enable them teach life skills. Besides this, a study by Maphumulo (2015) revealed that mathematics teachers had negative attitudes attributed to serious shortage of teaching resources. On the contrary, a study by Kisanga (2016) found out that teachers had a positive attitude towards e-learning due to availability of necessary requirements such as computer exposure.

During interviews, teachers expressed a lack of teaching materials. Lack of these materials is a demoralising factor to the teachers' hence poor attitudes, as one of the respondents expressed, *"But when a teacher complains and raises an issue, maybe he doesn't have this or that, and nobody is listening, he will work, yes because he was employed to work but not whole heartedly,"* (D/P1). This was intensified by another respondent as he remarked, *"In Gucha sub-county it is pathetic. There are no books in schools! No wonder our mean is always below the national mean,"* (SCQASO).

From these extracts, it is clear that the administration does not support teachers to perform their duties. Teachers are not provided with the necessary materials to successfully perform their duties. Lack of teaching and learning materials precipitates negative attitudes among teachers.

According to the findings of this study, the school Principals did not promote a work environment where all teachers felt included. Cumulatively, 29(40.9%) agreed and agreed strongly that their Principals provided such environments. A greater number, 42(64.6%) of the respondents, either disagreed or was undecided. As interviews were carried out, one respondent added that, *"But in this school, we decide who will do this and who will do that because some people are so troublesome. (D/P 1)*

Moreover, the efforts of teachers were not appreciated by the administration. This could reduce the morale of teachers, thus making them develop negative attitude towards their work. Similarly, a study by Omolara and Adebukola (2015) found out that teachers had a negative attitude towards teaching and learning in secondary schools due to lack of motivation by stakeholders, hence teaching was not done effectively and efficiently.

From the following excerpts, is clear that teachers do not feel appreciated or involved in any way in the activities of the school. If their efforts are not appreciated, it would mean their presence in the school is not felt in any way and this would negatively affect their attitudes.

## International Journal of Novel Research in Education and Learning

Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

*“Our efforts are not appreciated in any way. No, whether you achieve your set target, our Principal is just there. There used to be education days which stopped some years back when I am told the school became broke. I am sorry to say that the administration, I mean the Principal sometimes does not remember that examination results are out. It is me and the teachers who calculate the subject means. This is a discouragement because everybody wants to be recognized and appreciated,” (D/P5)*

From the excerpt by D/P 5, it is clear that the attitude of teachers is negative because to begin with, they do not have sufficient teaching materials, and they are not supported in co-curricular activities. Not only that, their efforts are not appreciated in any way by for instance being awarded after performing well. This definitely would make teachers develop negative work attitudes.

Moreover, the study established that more than a half 37(52.1%) of the teachers were not allowed time for training or professional development. Similarly, a study by Yusuf (2015) revealed that majority of teachers, (68%), had a negative attitude towards teaching and reading, and these attitude was attributed to lack of adequate preparation and training to teach reading in primary schools. This is supported by Abobo(2017) and Onguti, Aloka and Raburu (2016) who reported that teachers had negative attitudes towards teaching in various areas due to lack of relevant training. A similar situation was reported in Nyamache sub-county by Omae, Onderi, Mokogi, Bantu and Barongo (2016) who associated teachers' negative attitudes to lack of continuous skill upgrading. On the other hand, a study by Kisanga (2016) found out that teachers had a positive attitude towards e-learning since they were provided with relevant training which widened their understanding.

During interviews the study found out that teachers were not fully supported to attend further training. They indicated that they were talented in various areas and felt that if those skills were upgraded, they would transfer them to students. Unfortunately, this does not happen:

*Teachers who are talented in co-curricular activities are not fully supported. However, sometimes they are allowed to attend clinics and also train students for the same. Some teachers also attend workshops such as KNEC, KLB and others. But in this school, not everybody will get the training because the Principal associates everything with money. If there is no money, some teachers may be left out. (D/P 1)*

From this excerpt, some teachers attend clinics and workshops while others do not. This means that those who do not go for training will definitely develop a negative attitude towards their work. For teachers to work effectively, they should be allowed to undergo training due to the several curriculum adjustments experienced in the country in the recent times, otherwise they may lose track in their work thus their attitude may be affected negatively.

At the same time, teachers did not have sufficient opportunities to advance in their various stations. Only 27(38%) agreed that they had opportunities to advance while a cumulative percentage of 62 of the respondents either disagreed or were undecided. Generally, they scored 2.6(56%) meaning they almost generally disagree that they are given opportunities to advance. Similarly, Iwu, Ezeudji, Iwu, Ikebuaku and Tengeh (2018) also revealed that teachers' growth opportunities and responsibilities attached to work greatly contributed to job satisfaction.

During interviews, it emerged that the administration would not allow teachers to advance. Teachers who were talented in various areas were not given opportunities to make use of their skills. This would hinder the attitude of teachers. The excerpt that follows brings this out clearly;

*Recognising teachers' skills? The Principals have not done that especially in sports and co-curricular activities. If we had good skilled and talented teachers in sports, we could not have poaching of students. Players are poached. If a teacher poaches players is that a talented teacher? Principals put their friends in the offices to eat. Most teachers have the skills but they are not recognised or supported, or motivated. (SCQASO)*

This excerpt indicates that the teachers' special skills are not recognized. The respondent illustrates this using co-curricular activities or the games department where the officials are either not talented or if they are, they have not gone through relevant training; hence they 'poach' players. The skill, if well nurtured or developed, would be an opportunity for a teacher to advance to better levels. If teachers are denied such opportunities, they may not find it necessary to work hard. Lack of such opportunities may be a good recipe for negative attitudes among teachers.

From these findings, the study revealed that the attitudes of teachers in Gucha sub-county are generally negative. Teachers could be ready to perform their duties as expected but they work under very difficult circumstances and this would be a hindrance to their attitudes.

**4.1.3 Correlation between Social Comparison and Attitude towards work among teachers:**

The following hypotheses were then tested.

Ha: there is a statistically significant relationship between social comparison and attitude towards work among teachers.

Ho: There is no statistically significant relationship between social comparison and attitudes towards work among teachers.

To achieve this, the responses in Table 4.1 (Responses to social comparison items) were scored accordingly. The responses on Table 4.2 (Response to attitude-towards work items) were also scored. The scores were correlated using Pearson Correlation with the help of SPSS to obtain the results in table 4.3:

**Table 4.3: Correlation between social comparison and attitude towards work**

		Teachers' social comparison	Teachers' attitude towards work
Teachers' social comparison	Pearson Correlation	1	.816**
	Sig. (2-tailed)		.000
	N	71	71
Teachers' attitude towards work	Pearson Correlation	.816**	1
	Sig. (2-tailed)	.000	
	N	71	71

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 4.3 shows that the correlation coefficient was  $R=0.816$  which implies that  $P<0.05$ . This indicates a strong positive relationship between social comparison and attitude-towards work. When the value of 'r' is positive, it means that social comparison among teachers moves in the same direction with the teachers' attitude towards work. In other words, social comparison among teachers has a strong positive effect on their attitude towards work. Therefore, since there was a statistically significant relationship between social comparison and attitude towards work among teachers, the null hypothesis (Ho) was rejected. The study agrees with a study by Gigasari and Hassaskha (2017) who found out a positive significant relationship between social comparison and burnout among teachers.

**4.1.4 Regression analysis between social comparison and attitude towards work:**

Regression analysis was carried out in order to determine the variability of attitude towards work that would be predicted by social comparison. The results in Tables 4.4, 4.5 and 4.6 were obtained. The results on Table 4.4 help figure out how well a regression model fits the data.

**Table 4.4: Regression Model summary for social comparison and attitude towards work**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.816 <sup>a</sup>	.667	.662	6.226

a. Predictors: (Constant), Social comparison among teachers

Table 4.4 shows that  $R=0.816$  which indicates that there is a strong positive correlation between social comparison and attitude towards work.  $R^2$  is the coefficient of determination. It determines the fraction of attitude towards work that social comparison can account for. This further implies that  $R^2=0.667$  which means that 66.7% of the variability in attitude towards is predicted by social comparisons amongst the teachers. This variability is large, meaning that social comparison among teachers is one of the major factors that influence the attitude of teachers towards their work

The ANOVA table, (Table 4.5) reports how well the regression equation predicts attitude towards work among teachers with the F test and the P-value. The value of F, is the probability that the null hypothesis for the full model is true. At the same time, a low P-value ( $<0.05$ ) means that the null hypothesis can be rejected.

International Journal of Novel Research in Education and Learning

Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

Table 4.5: ANOVA<sup>b</sup> for social comparison and attitude towards work

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	5344.776	1	5344.776	137.897	.000 <sup>a</sup>
	Residual	2674.379	69	38.759		
	Total	8019.155	70			

a. Predictors: (Constant), Social comparison among teachers  
 b. Dependent Variable: Attitude towards work among teachers

Table 4.5 details that, F=137.897 at 70 df (degrees of freedom) and P= 0.000< 0.05 hence the test is highly significant. The results indicate that the model predicts the attitude towards work in a very significant manner, hence social comparison statistically significantly predicts attitude towards work among teachers. The study therefore concluded that there is a linear relationship between social comparison and attitude towards work. Table 4.6 shows the regression coefficients and their significance.

Table 4.6: Social comparison and attitude towards work regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.505	4.077		2.086	.041
	social comparison among teachers'	1.010	.086	.816	11.743	.000

a. Dependent Variable: Attitude towards work among teachers'

Table 4.6 shows that Beta value is 0.816. This is a positive value which indicates that social comparison positively predicts attitude towards work among teachers. B=1.010, t=11.743 and the p-value is 0.000<0.50. This shows that social comparison significantly predicts attitude towards work among teachers.

4.2 Relationship between Persuasive Arguments and attitude towards work among Teachers:

Persuasive arguments happen when teachers try to sway other teachers to their side during staff deliberations by being extreme in their arguments, which makes teachers to make extreme decisions or extreme attitude shifts. Persuasive arguments may be emotional, ethical or logical. To find out the relationship between persuasive arguments and attitude towards work among teachers, respondents were asked to score the various Likert items and their responses were recorded in Table 4.7.

Table 4.7: Response to persuasive Argument

Statement	Frequency			A	SA	F	TS	AS	%
	SD	D	U						
I always pay attention to what my colleagues say when we make deliberations	4 5.6%	6 8.5%	2 2.8%	44 62.0%	15 21.1%	71	273	3.8	76
I pay more attention to the facial expressions and gestures rather than words of colleagues when they raise arguments	12 16.9%	34 47.9%	12 16.9%	9 12.7%	4 5.6%	71	172	2.1	42
I pay more attention to the words and expressions rather than the facial expressions used by a colleague when they raise arguments	5 7.0%	14 19.7%	11 15.5%	31 43.7%	10 14.1%	71	240	3.3	66
I get encouraged by arguments raised by other teachers in my staff to work harder	8 11.3%	25 35.2%	13 18.3%	14 19.7%	11 15.5%	71	208	2.9	58

I take into consideration any new information i receive during staff meetings	1 1.4%	5 7%	7 9.9%	42 59.2%	16 22.5%	71	280	3.9	78
I get satisfaction and fulfillment after staff deliberations	3 4.2%	14 19.7%	24 33.8%	22 31%	8 11.3%	71	231	3.2	64
I make ethical consideration before adopting any new information that i receive	2 2.8%	3 4.2%	6 8.5%	38 53.5%	22 31%	71	288	4	80
Ethical arguments make me improve on performance of my duties	3 4.2%	15 21.1%	17 23.9%	27 38%	9 12.7%	71	237	3.3	66
I am drawn by emotional arguments to work more effectively	17 23.9%	28 39.4%	9 12.7%	13 18.3%	4 5.6%	71	172	2.4	44
I work better after listening to a logical argument from other teachers	4 5.6%	13 18.3%	11 15.5%	32 45.1%	11 15.5%	71	246	3.5	70
I am more likely to change my work habit after listening to an emotional argument	15 21.1%	26 36.6%	13 18.3%	15 21.1%	2 2.8%	71	176	2.4	44
I am more likely to change my work habit after listening to a logical argument	4 5.6%	11 15.5%	13 18.3%	27 38%	16 22.5%	71	253	3.6	72
The other teachers' arguments do not influence me in any way	14 19.7%	28 39.4%	13 18.3%	10 14.1%	6 8.5%	71	179	2.5	50
I make better decisions after listening to the information given by other teachers about an issue	3 4.2%	20 28.2%	21 29.6%	24 33.8%	3 4.2%	71	217	3	60
Any kind of information that i receive from my colleagues is not important to me.	10 14.1%	29 40.8%	22 31.0%	10 14.1%	0 0%	71	133	1.9	38
Total							3.0	65%	

(Source: Researcher 2018)

According to the findings of this study, teachers did pay attention to what their colleagues said when they made deliberations, a statement with which a total of 59(83.1) of the respondents agreed. They got an average score of 3.8(76%) meaning they generally pay attention to an arguing colleague. This is supported by Zhu (2009) who reported that individuals freely exchanged arguments that were available to them during group discussions. Contrary to this, Zeitoun (2017) reported that teachers who had received written persuasive communication had a positive change of their attitudes.

Interviews that were carried out also revealed that teachers engaged in persuasive arguments. The respondent felt that a meeting could only succeed when arguments were effectively done;

*In any case young teachers would like to hear how old teachers bring out some points in matters of school administration, curriculum development and delivery and so on. Quality arguments form the basis of the success of any meeting. A good argument can easily boost the morale of the teachers, and also boost their attitude towards their work.” (SCQASO)*

This response clearly indicates that for arguments to be successful, they have to be of quality. Further, deliberations help younger teachers to get expert information from older teachers Emphasis is placed on attitude where the respondent feels that argumentation can boost the morale and hence the attitude of teachers towards their work. These remarks are supported by Brady and Bavel (2018) who reported greater agreement with the message when the source had high expertise than when the source had low expertise.

The study established that majority of the teachers were biased against the emotion or *pathos* aspect of persuasive arguments. 45(63.3%) of the respondents did not consider the emotion in an argument important. This is because cumulatively, 13(18.3%) of the participants would not pay attention to the facial expressions and gestures used by arguing colleague, where they scored 2.1(42%), meaning that in general they did not consider the emotion in an argument. The

findings were in line with those of Webster (2012) who found out that an affectively based attitude would be changed through the peripheral route of persuasion which used emotion. On the contrary, a study by Van Kleef, Berg and Heerdenk (2015) found out that a person could use the emotional expression on another person as information when forming their own attitudes.

During interviews, the study established that emotional arguments could either have a positive or negative influence depending on how the argument was made.

*It all depends on the emotion that was elicited because there are emotions of happiness, emotions of sadness, so it depends on the direction to which the argument was geared towards. For instance if it is about a teacher who was mistreated, it will definitely discourage the other teachers. But if it geared towards a teacher who was assisted a lot, the teachers will get encouraged. Emotional arguments must sway the teachers' attitude towards the presentation of that argument. If positively presented, the attitude will be positive and if negatively presented, the attitude will be negative.* (D/P 3)

This excerpt underscores the importance of emotion in argument; it is a very important determinant of a teacher's attitude shift. According to the extract, depending on not only the information but also the emotion that accompanies it, a teacher's attitude can be extremely shifted either positively or negatively. This finding agrees with Brady and Bavel (2018) who reported that strong arguments lead to agreement with the message than weak arguments. It is further supported by Putte, Niejens and Wit (2017) who found out that affective messages became more affective as attitudes were more cognition based.

Further, emotional arguments were found to have little or no influence on the attitude of teachers towards work. Only 17(23.9%) of the respondents agreed that emotional arguments made them work more effectively where they averagely scored 2.4(44) meaning they generally disagreed. They also would not agree to the statement that the emotion in an argument could make them change their work habit, where only 17(23.9%) of the respondents agreed. Their average score here was 2.4(44%) meaning they generally would not change their work habit due to an emotional argument. Similar findings were obtained by Swol (2009) whose experiment revealed that groups containing an extreme member did not polarize more than groups not containing an extreme member. Contrary to these findings, Van Kleef, Berg and Heerdink (2015) reported that participants reported more positive attitudes after seeing happy (rather than sad) expressions when topics were positively framed.

Interviews that were carried out gave similar findings. When asked how emotional arguments influenced the attitude of teachers, it emerged that emotional arguments had a negative influence on the attitude towards work. Some of the responses obtained include:

*Whenever a teacher argues in a very emotional way, it can have a lot of influence especially a negative one. When teachers are very emotional, they suppress the ideas that the other teachers had. If these ideas are suppressed, you may not have way forward for a number of issues or you may not solve a problem or you may not assist the teacher him/herself.* (D/P 2)

This was echoed by another respondent who said, *"Emotional arguments usually they can bring divisions or withdrawal where people fear to bring out their ideas because of the emotional aspect,"* (D/P 5).

From these excerpts, the study found out that teachers repulsed emotional arguments. According to D/P2, when a teacher would argue in an emotional manner, it would make the other teachers fear to speak freely, which would suppresses important ideas and information from the other teachers, hence the issue at hand would not be resolved amicably. D/P5 also felt that these arguments would bring subdivisions where some members would fear or feel excluded hence suppressing ideas. The study thus found out that emotional argumentation would make the attitude of teachers decrease.

According to the findings on Table 4.7, the *ethos* of persuasive arguments was taken into consideration by a total of 60(84.3%) of the respondents. On this, they averagely scored 4(80%) meaning; they generally pay attention to the *ethos* of an argument. However, like emotional arguments, ethical arguments were found to have unpredictable influence on the attitude of teachers towards their work because a half, 36 (50.7%) of the respondents agreed that the *ethos* in an argument made them improve how they performed their duties. Their average score here was 3.3 (66%) which indicates the

## International Journal of Novel Research in Education and Learning

Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

unpredictable influence of the ethos on their attitudes. Similarly, Willer and Feinberg (2015) found that ethical rhetoric is largely ineffective in persuading those who do not already hold one's position because those advancing these arguments fail to account for the divergent moral commitments. Contrary to the findings, a study by Algaseer and Kowalski (2013) found out that arguments based on ethics can generate a positive attitude and increase the potential for influence.

From interviews, it emerged that ethical part if an argument would assist the teachers do things according to the laid down rules and regulations so that they could be on track;

*If we consider the moral values in an argument, it will assist us to do things according to the laid down rules and regulations or in a professional way. They remind us on our responsibilities so that we do not side-track.(D/P 2)*

Not only that, "Ethical arguments recognise that we are social beings. They bring teachers together and hence boost their attitude".SCQASO.

From these remarks, the study found out that ethical arguments would have a positive influence on the teachers' attitudes because teachers are reminded of their duties as teachers, and hence perform them in a professional way.

On the other hand, some respondents felt that the ethos in an argument could have a negative influence due to the fear that people associate with ethics and rules;

*In most cases as a staff if we are putting more of ethics, it sometimes casts fear to the teachers, it is like you are telling them of the repercussions. So they will be working with regard to the repercussions and not to do their duties as required or from inside them. (D/P1)*

While another one put it that;

*Ethically based arguments actually demoralise teachers. This is because teachers feel like they are being forced to work while following some rules and regulations or else they face repercussions. So such arguments may make the attitude of a teacher more negative. If their attitude has to be positive, they should be allowed to work in a free environment.(D/P 5)*

From the interview responses the study found out that the ethos part of the arguments would make teachers dislike their work. This is because there is a general feeling that they make teachers feel that they are working in an environment with rules to be followed, which may cause fear among the teachers. Others feel that the rules remind and monitor them so that they remain on track. Therefore, these findings show that the influence of the *ethos* of an argument was unpredictable because it depends on how the listeners perceive the argument. Teachers who perceive the ethics of an argument positively make positive attitudes. They perform their duties according to the laid down rules and regulations and this of course, leads to fruition. On the other hand, teachers who perceive the ethical argumentation negatively may feel that they are coerced to work hence develop negative attitudes. In other words, ethical arguments may not successfully cause group polarization. This is in line with Esterling, Fung and Lee (2013) in whose experiment, persuasion took place but polarization did not occur.

Another finding of this study was that respondents were more receptive to arguments based on logic. Cumulatively, 41(57.8%) of the respondents agreed that they paid attention to the words used by a deliberating teacher rather than the emotion he expressed. 43(60.6%) of the respondents also agreed that they would work better after listening to a logical argument from other teachers. Averagely they scored 3.5(70%) indicating that in general, they got a positive influence on their work attitude. This was in agreement with Mercier (2012) who reported that individual reasoning mechanisms work best when used to produce and evaluate arguments during deliberations. Further, when people reason either alone or with like-minded peers, they reinforce their initial attitudes through confirmation bias. This is supported by Bresnahan (2013) who reported that in a group discussion context, a greater emphasis is placed on the quality of the novel arguments rather than the mere quantity of novel persuasive arguments.

During interviews, it emerged that logic in an argument was very crucial because it would make teachers to reason together and resolve issues in a rational manner.

*If an argument is based on facts, it enables us to see how things should have been done. When a teacher is taken through an issue in a logical or rational manner, he is able to see another perspective which he did not initially have in mind. Logical arguments are good. In fact you become more reasonable in the way you perform your duties. (D/P 2)*

From this response, it is clear that the logic in an argument is more influential because it can make a teacher see the other perspective that he did not have initially. This shows that the respondents would be more interested in the logic or reason in the arguments rather than the emotion in it. They could pick sense from the argument without even having to see how the speaker expressed it. The logos of an argument can thus make a teacher develop an attitude depending on how the argument is developed. The study therefore found out that teachers would have cautious shifts due to logical argumentation because in most cases such argumentation calls for teacher involvement.

Moreover, logical arguments were found to influence a greater percentage 43(60.5%) of the respondents who through their score of 3.6(72%) generally agreed that they were more likely to change their work habit after listening to a logical argument. A similar study by Penczynski (2010) found out that individuals give up their initial decisions when confronted with more sophisticated arguments and maintain their initial decisions otherwise. Also according to Webster (2012), a cognitively based attitude would most likely be changed through the central route of persuasion which uses logical arguments.

Interviewees were also propped on the influence of an argument that had logic in it. It was revealed that logical arguments boost the attitude towards work. This is true considering the responses;

*Arguments based on logic are actually the best in motivation and in communication. For teacher to work, there must be clear set out targets. When it is logically argued, it is easy for a teacher to know what is expected of them. (D/P5)*

According to another respondent,

*Logical arguments form the basis of the success of any meeting. Logical arguments can easily boost the morale of the teachers, and also boost their attitude towards their work. (SCQASO)*

In other words, logical arguments bring about teacher involvement because everyone gets involved in the activity of reasoning. Besides that, deliberations that are done in a rational manner are mostly successful and this would boost the attitudes of teachers. Therefore, the logos of an argument is more motivating because such arguments provide information that makes make teachers know what is expected of them. This finding concurs with Mercier (2012) who revealed that when diverse opinions are discussed group reasoning will outperform individual reasoning.

The study found out that logos part of the persuasive arguments had a greater effect on the attitude towards work among teachers as compared to pathos and the ethos. This is in line with a study by Webster (2012) which revealed that the success of persuasion can depend on the kind of attitude someone is trying to change. The attitudes of teachers are cognitively based, which explains why they are positively influenced by logic to make cautious attitude shifts. The study thus found out that persuasive arguments would make teachers change their attitudes towards work either positively or negatively depending not only on the information in the argument but also the way it is expressed. The findings agree with those of Aloka and Bojuwoye (2014) who reported that when an individual hears one or more colleagues 'arguments, the individual's thinking is likely to be shifted towards the arguments of the other colleagues in the group. This is contrary to Esterling, Fung and Lee (2013) who found out in their experiment that, ideological persuasion took place but polarisation did not occur. Moreover, small group dynamics depend on the context in which the discussion occurs.

#### **4.2.1 Correlation between Persuasive arguments and attitude towards work:**

The study further tested the following hypothesis through Pearson Correlation:

Ha: There is a statistically significant relationship between persuasive argument and attitude towards work among teachers.

Ho: There is no statistically significant relationship between persuasive argument and attitude towards work among teachers.

The responses on Table 4.7 (Response to Persuasive Arguments) were scored accordingly and correlated with the responses on Table 4.2 (Responses to attitude towards work) to obtain the results in Table 4.8

**Table 4.8: Correlation between persuasive arguments and attitude-towards work among teachers**

		Teachers' persuasive arguments	Teachers' attitude towards work
Persuasive arguments among teachers	Pearson Correlation	1	.522**
	Sig. (2-tailed)		.000
	N	71	71
Attitude towards work among Teachers'	Pearson Correlation	.522**	1
	Sig. (2-tailed)	.000	
	N	71	71

Table 4.8 shows that the correlation between persuasive arguments and attitude-towards-work among teachers is 0.522. Thus,  $r = 0.522$ , a medium positive correlation which indicates that persuasive arguments fairly influenced the attitude towards work among teachers. The null hypothesis was therefore rejected because there was a statistically significant relationship between persuasive arguments and attitude towards work among teachers. This agrees with Anghelache, (2014) that if teachers have an initial anti-work attitude, a persuasive counter-attitudinal message will immediately lead to a significant increase to pro-work attitude, however, the effect is no longer accentuated with the passing of time.

**4.2.2 Regression Analysis between Persuasive arguments and attitude towards work:**

The study sought to determine how persuasive arguments predicted attitude towards work among teachers. This was achieved through regression analysis where the results in Table 4.9-4.11 were obtained.

**Table 4.9: Regression Model summary for persuasive arguments and attitude towards work**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.522 <sup>a</sup>	.273	.262	9.193
a. Predictors: (Constant), Persuasive arguments among teachers				

The results in Table 4.9 indicate that  $R = 0.522$ . This shows that there is a positive correlation between persuasive arguments and attitude towards work among teachers.  $R^2$  shows the amount of variability in attitude towards work that persuasive arguments predict.  $R^2 = 0.273 = 27.3\%$ . Therefore, persuasive arguments are responsible in predicting 27.3% of the variability in attitude towards work. Table 4.10 gives the P-value and the F-statistic. These coefficients determine whether there is significant prediction of the attitude towards work by persuasive arguments or not.

**Table 4.10: ANOVA between persuasive arguments and attitude towards work**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2188.296	1	2188.296	25.895	.000 <sup>a</sup>
	Residual	5830.859	69	84.505		
	Total	8019.155	70			
a. Predictors: (Constant), Persuasive arguments among teachers.						
b. Dependent Variable: Attitude towards work among teachers						

From the table,  $F = 25.895$  at 70 degrees of freedom and  $P = 0.000 < 0.05$ . This means that persuasive arguments predict attitude towards work among teachers in a statistically significant manner. The next table (Table 4.11) shows the value of B, Beta, t and the P-value. These values help determine whether persuasive arguments significantly predicts attitude towards work among teachers.

**Table 4.11: Persuasive arguments and attitude towards work regression coefficients**

Model		Unstandardized coefficients		Standardized coefficients	T	Sig.
		B	Std. Error	Beta		
1	(constant)	8.710	9.277		.939	.351
	Teachers' persuasive arguments	.915	.180	.522	5.089	.000
A. Dependent variable: attitude towards work among teachers						

The results on the table show a positive Beta value of 0.522. This indicates that persuasive arguments have a positive influence on attitude towards work among teachers. Again,  $B=0.915$ ,  $t=0.5089$  and the  $P\text{-value}=0.000<0.05$ . This shows that Persuasive arguments predict attitude towards work in a statistically significant manner. Therefore the null hypothesis is rejected.

## 5. SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

### 5.1 Summary of the study:

#### 5.1.1 Relationship between social comparison and attitude-towards work among teachers:

The study found out that teachers who engaged in upward social comparison made cautious attitude shifts. They changed their attitudes positively by deciding to work harder or improve in the way they performed their duties in order to be like their comparison targets. On the other hand, the study found out that teachers who engaged in downward social comparison made risky attitude shifts. They stopped to do their work as expected because after all they had achieved much more or had done much better than the rest. Pearson correlation showed a strong positive relationship between social comparison and attitude towards work among teachers with a correlation coefficient ( $r$ ) =0.816 which means that social comparison has a strong positive effect on attitude-towards-work among teachers. The coefficient of multiple determination ( $R^2$ ) was 0.667 which means that 66.7% of the variability in attitude towards work was predicted by social comparisons amongst the teachers. This variability is large, meaning that social comparison among teachers is one of the major factors that influence the attitude of teachers towards their work. Similar results were obtained from interview data.

The attitudes of teachers towards work were analyzed where quantitative data was analyzed through descriptive statistics while qualitative data was analyzed through the thematic framework. Teachers were found to generally have negative attitudes towards their work with an average score of 3.35 on the likert scale. This might have been due to various factors such as impartial leadership styles, lack of motivation, lack of recognition and support, lack of sufficient teaching materials, lack of retraining and lack of sufficient opportunities to advance.

#### 5.1.2 Relationship between persuasive arguments and attitude-towards-work among teachers:

The study sought to know whether the *pathos* (emotion), *ethos* (ethics) or *the logos* (logic) of an argument could lead to attitude shifts. It was found out that the logic in an argument led to cautious attitude shifts by teachers while the emotion and the ethics led to extremely risky attitude shifts. After Pearson correlation the coefficient that was obtained was,  $r=0.522$ . This indicated a medium positive correlation which meant that persuasive arguments had a fair positive influence on attitude-towards work among teachers. THE Coefficient of multiple determination,  $R^2$  was 27.3%. Therefore, persuasive arguments were responsible in predicting 27.3% of the variability in attitude towards work. Results from qualitative data revealed that teachers who paid attention to arguments with logic in them made cautious attitude shifts while those who paid attention to arguments with emotion and ethics were not much influenced. The fair relationship was due to the logos in the arguments.

### 5.2 Conclusion of the study:

From the findings of the study, it is evident that there is a relationship between group polarization and attitude-towards work among teachers. However, some elements of group polarization have a stronger relationship with attitudes than others. The first objective was to investigate the relationship between social comparison and attitude towards work among teachers. Basing on the findings, the study concluded that teachers engaged in social comparisons amongst themselves. Most teachers engaged in upward comparison, where they compared with those who they believed were the best performers and for them to obtain better results tended to copy what their comparison targets were doing. As teachers made these comparisons they made attitude shifts, especially cautious shifts. With regard to interviews, the study concluded that teachers decided to work harder, either to maintain what they had achieved or to get good results like those of the performing teachers. From the strong relationship between social comparison and attitude towards work, the study concluded that social comparison was responsible for the attitudes of teachers. Besides, as teachers compared themselves with other teachers they acquired positive traits which they implemented in their own areas and improved their performance of duties.

The second objective was to establish the relationship between persuasive arguments and attitude-towards-work among teachers. The study concluded that there was a medium positive relationship between persuasive arguments and attitude towards work among teachers. Further, the medium relationship was due to the logic and the emotion part of the arguments which most teachers paid attention to. Considering the interview findings, the study concluded that the *logos* aspect of arguments boosted their attitudes as compared to the *pathos* and the *ethos* aspects.

The study finally concluded that group polarization was a determinant of the attitude towards work among teachers, where social comparison was the major element that determined how teachers made decisions or attitude shifts in comparison with the other teachers.

### 5.3 Recommendations of the study:

In view of the findings, the study made the following recommendations:

The ministry of Education should sensitize teachers on the importance of good attitude towards their work. The Ministry through the Principals should ensure that teachers are provided with a satisfying work environment so that teachers may not regroup and form negative attitudes

The Ministry of Education should offer guidance and counseling programs to teachers by employing permanent counselors in schools. This may help teachers deal with issues in an objective way and be careful in making decisions.

The Principals should provide environments in schools where all teachers feel included. They should be impartial and treat all teachers equally. The Principals should put in place proper and functional communication channels and embrace communication skills. This is because the structural faults arising from communication were found to be the major cause of group think among teachers.

Teacher counselors should guide teachers to be open-minded and flexible when they hold staff deliberations.

### 5.4 Suggestions for further research:

While this study contributed significantly to knowledge by unearthing additional factors that influence or determine the attitudes of teachers towards work, it identifies some areas that need further investigation by future researchers. These include:

- i) A study on the influence of teachers' working environment on teachers' attitudes in Kenya
- ii) Teacher factors as determinants of the teacher's attitude towards work in Kenya
- iii) Community factors as determinants of teachers' attitude towards work in Kenya

### REFERENCES

- [1] Abou-Zeid M. & Ben-Akiva M. (2010). *The effects of social comparison commute wellbeing*. Massachusetts Institute of Technology. Cambridge U. S. A.
- [2] Aloka, P. J.O (2012). *Group Polarization in Decision Making: A Study Of Selected Secondary schools Disciplinary panels in Rongo District, Kenya*. Retrieved from: etd. uwc.ac.za. URI: <http://hdl.handle.net/11394/3294>
- [3] Aloka P.J.O &Bojuwoye O. (2014). Social comparison influences on disciplinary panels: A brief qualitative study in Kenyan secondary schools. *Journal of Psychology in Africa*. Retrieved from: [www.tandfonline.com](http://www.tandfonline.com) Vol. 24 pp288-292
- [4] Aloka, P.J.O &Bojuwoye, O. (2014). Persuasive argument as a determinant of group polarization: A study in selected Kenyan secondary school disciplinary panels. *Mediterranean Journal of Social Sciences*. Retrieved from [www.mcseser.org](http://www.mcseser.org) DOI: 10.5901/mjss.2014.v5n10p348
- [5] Adeniji, F.O., (2010). *Groupthink among health workers ; the Nigerian perspective*. Retrieved from: <http://www.sciencepub.net> 2010;2(5)
- [6] Allsageer M. & Kowalski, S.R. (2013). What do Lybian doctors perceive as the benefits, ethical issues and influences of their interactions with pharmaceutical company representatives? *The Pan-African Medical Journal*. Retrieved from: <https://www.ncbi.nlm.nih.gov> on 4/14/2017

**International Journal of Novel Research in Education and Learning**

 Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

- [7] Anghelache, V (2014). The Influence of Persuasive Messages in Determining Teachers' Attitude towards Change in Education. *Procedia Social Sciences* 127(2014) pp41-46
- [8] Audu, V. E. I & Egherevba, J. (2016). Undergraduate Students' Perception and Attitudes towards Teaching Profession in University of Benin, Nigeria. *Journal of Education and Social Research*. Doi: 10.590/jesr.2016.v6n1p184
- [9] Banwo, A.O, Du, J and Onokala, U. (2015). The Impact of Group Cohesiveness on Organizational Performance: The Nigerian Case. *International Journal of Business Management*. Vol.10, No.6; 2015
- [10] Brady, W. and Bavel, J.V. (2018). Persuasion: Motivational factors Influence=ing Attitude Change. *Social Psychology*. JOVE, Cambridge, MA
- [11] Becker, J., Brackbill, D & Centola, D. (2017). Network dynamics of social influence in the wisdom of crowds. *Proceedings of National Academy of Sciences*, 2017; 201615978 DOI: 10.1073/pnas.1615978114
- [12] Bresnahan, M. (2013). *Effects of Persuasive Arguments on Group Polarization and Risky Shifts*. Retrieved from: <https://mathewbresnahan.files.wordpress.com>
- [13] Cherry K. (2016). *What is social comparison Theory?* From <https://www.verywell.com>
- [14] Chisamisho, C., Sifile, O., Chavunduka, M.D., Mabvure, T.J & Dandira, M. (2014). Organizational culture and its Impact on Educator performance. A case of educators in Masvingo urban in Zimbabwe. *The International Journal of Humanities and Social Sciences*. Retrieved from [www.theijhss.com](http://www.theijhss.com) on 5/4/2017
- [15] Coleman, T. (2013). *Group polarization vs the risky shift* phenomenon. Retrieved from <https://www.prezi.com> on 5/4/2017
- [16] Colomeischi, A.A. & Colomeischi, T. (2014). Teachers' attitudes towards work in Relation to Emotional intelligence and self-efficacy. *Procedia-social and social sciences*. Vol. 159, 23 Dec. 2014 pp. 615-619
- [17] Creswell, J.W. (2003). *Research Design: Qualitative, Quantitative and Mixed Methods approaches*. Los Angeles. USA
- [18] Downes, P.E (2015). *Social Contexts and Motivation: The Role of Upward and Downward Comparisons*. University of Iowa, 2015. Retrieved from <http://ir.uiowa.edu/etd/5747>
- [19] Elena, G. (2015). *Group polarization vs the risky shift*. Retrieved from: <https://www.prezi.com> on 6/5/2017
- [20] Esterling, K.M., Fung, A. and Lee, T. (2013). Ideology, Deliberation, Persuasion within Small Groups: A Randomized Field Experiment. Retrieved from <http://web.hks.harvard.edu/publications>. RWP 13-0136
- [21] Gabbay, M., Kelly, Z., Reed, J. and Gastil, J. (2017). Rhetorically Induced Group Polarization in Small Opinion Networks. arXiv:1710.10295v1[physics.soc-ph] 27, Oct. 2017
- [22] Galkowski P. (2014). *Persuasive argumentation as a cultural practice*. Volume 4 (1/2014) pp123-134. Retrieved from: [cjesh.icm.edu.pl](http://cjesh.icm.edu.pl)
- [23] Getange, K.N., Nyakan, P.O & SAgwe, G. (2015). Influence of teachers working conditions on curbing examination malpractices I public secondary schools in Kisi county, Kenya. *International Journal of Recent Research in Social Sciences and Humanities* . Retrieved from: [www.paperpublications.org](http://www.paperpublications.org) on 15/5/2017
- [24] Gigasari, N. & Hassaskha, J. (2017). The effect of social comparison tendencies on EFL teachers' experience of burnout, and instructional self-efficacy. *Cogent Psychology*. Retrieved from: <https://doi.org/10.1080/23311908.2017.1327130>
- [25] Golkar, H. (2013). Group think principles and fundamentals in organizations. *Interdisciplinary Journal of Contemporary Research in Business*. Retrieved from: [ijrb.webs.com](http://ijrb.webs.com) on 2/10/2017. Vol. 5 No. 8
- [26] Goob, L.R. and Nelson, D.A. (2013). Effect of Person Group and Intra-group Attitude Similarity on Perceived Group Attractiveness and Cohesiveness. *Psychonomic Science*. October, 2013, Vol.25, Issue 4, pp215-217

**International Journal of Novel Research in Education and Learning**

 Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

- [27] Heffner, C. L. (2014). The Role of groups. *Psych Central's Virtual Psychology Classroom*. Retrieved from: <https://allpsych.com>
- [28] Isaiiah, M.N., & Nenty, H.J. (2012). Predicting job dissatisfaction among community junior secondary school teachers in Botswana. *Scientific Research Psychology*. (2012). Vol.3, No.3. pp277-283
- [29] Judge, T.A. & Kammeyer-Muller, J.D. (2012). *Job Attitudes*. *Annual review of psychology*. Doi: 10.1146/annurev-psych-120710-100511
- [30] Karr, C. (2011). The attitude of teachers towards teaching reading and content areas. University of West Indies.
- [31] Katreniakova, D. & Cerge -Ei. (2015). *Social-influence, rewards and incentives to learn ; A randomised trial in Uganda*. Retrieved from: <https://www.ajol.info.com> on 7/6/2017
- [32] Kinuthia, F., Kombo, D. and Mweru, M. (2013). Determinants of preschool teachers towards teaching. *African Journal of Education*. Retrieved from: <https://journal.lib.uoguelph.ca> p443
- [33] Kitchel, T. et al (2017). The three Elements of Persuasion. *American Management Association*. Retrieved from: <https://www.amanet.org>
- [34] Kothari C. R. (2004). *Research Methodology, methods and techniques*. New Age International (P) Limited, Publishers. India
- [35] Kusano, K., Frederiksen, S., Jones, L. & Kobayashi, M. (2013). The effects of ICT Environment on teachers 'Attitudes and Technology integration in Japan and the US. *Journal of Information Technology Education: Innovations in practice*. Vol. 12 (2013). Pp 29-43
- [36] Lam, V. L. & Seaton, J.A. (2016). In-group and out-group attitudes and group evaluations: The role of completion in British classroom settings. *Child Development Research*. Retrieved from: <http://dx.doi.org/10.1155/2016/8649132>
- [37] Lasisi, D., Ani, C., Lasebikan, V., Sheikh, L. and Omugbodun, O. (2017). Effect of attention- deficit-hyperactivity-disorder training program on the knowledge and attitudes of primary school teachers in Kaduna, North-West Nigeria. *Child and Adolescent Psychiatry and Mental Health*. Retrieved from: <https://www.ncbi.nlm.nih.gov> doi:10.1186/s13034-017-0153-8
- [38] Maliki, A.E. (2013). Attitudes of teachers in Yenagoa local government area Bayelsa state Nigeria towards the teaching profession: counselling implications. *International Journal of Research in Social Sciences*. June 2013. Vol. 2. NO. 2. Retrieved from: [www.ijsk.org/ijrss](http://www.ijsk.org/ijrss)
- [39] Mercier, H. and Landermore, H. (2012). Reasoning is for Arguing: Understanding the Successes and Failures of Deliberation. *Political Psychology*. Retrieved from <https://doi.org/10.1111/j.1467-9221.2012.00873.x>
- [40] Miles, P., Schaufeli, W. B. and Bos, K. (2011). When weak groups re strong: Low Cohesion Groups Allow Individuals to Act according to their Personal Absence Tolerance Norms. September 2011, 24: 207
- [41] Mobarra and Soraya (2015). *Survey of South African Expatriate attitudes towards inclusive education in Private and public schools in Oman*. Retrieved from: <http://hdl.handle.net/10500/19125>
- [42] Mosler, H.J. et al. (2015). *Risks, attitudes, norms, abilities and self-regulation (RANAS) intervention fact sheets*. Retrieved from: [www.susana.org](http://www.susana.org) pp24
- [43] Mosomi, M.M. (2015). *Job environment and satisfaction among pre-school teachers in Kisii County, Kenya*. Retrieved from: [ir-library.ku.ac.ke](http://ir-library.ku.ac.ke) on 5/22/17
- [44] Muganda, N., Asmelash, D & Mlay, S. (2012). *Groupthink decision making deficiency in the Requirements Engineering process: Towards a crowdsourcing Model*. Retrieved from: <https://www.researchgate.net>
- [45] Mugenda, O.M. & Mugenda, A. G. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi, Kenya. ACTS Press

**International Journal of Novel Research in Education and Learning**

 Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

- [46] Nalova, E.M. (2016). Teachers' culture and the implementation of inclusive Education in Cameroon Public secondary schools. *Imperial Journal of Interdisciplinary Research*. Retrieved from: <http://www.onlinejournal.in>
- [47] Ofojebe, W.N., & Chinelo, Z.T. (2010). Teachers' motivation and its influence on quality assurance in Nigerian Educational system. *African research Review, an International Multi-disciplinary Journal*. Vol4(2) April 2011
- [48] Olivia, (2016). What is Trustworthiness in Qualitative research? *Statistics Solutions*. Retrieved from <http://www.statisticssolutions.com>
- [49] Omae, D.O. et al. (2016). Factors affecting the utilization of time as a selected teaching /learning resource in public day secondary schools in Nyacheki Division, Kisii County, Kenya. *American Journal of Education and Learning*, 1(1): 16-24
- [50] Ombui, O. I. (2014). *Attitudes of teachers towards mentally retarded learners in Mosoch Division, Kisii county*. Retrieved from: <https://repository.mku.ac.ke> on 5/15/17. URI <http://hdl.handle.net/11915/1870>
- [51] Ong'uti, C.O., Aloka, P.J.O., & Raburu, P. (2016). Factors affecting teaching and learning in mother tongue in public lower primary schools in Tabaka Division, Kenya. *International Journal of Psychology and Behavioral Sciences*. Retrieved from: <http://creativecommons.org/licence/by/4.0/> Vol.6 No.3, 2016, pp161-166
- [52] Orodho J. A. (2003). *Essentials of Education and social science research methods: Qualitative and Quantitative approaches*. Nairobi, ACTS press.
- [53] Penczyski S. (2016) Persuasion: An experimental study of team decision-making. *Journal of economic Psychology*. October 2016, Vol.56:244-261, doi:10.1016/j.joep.2016.07.004
- [54] Putte, B.V., Niejens, P. and Wit, J. (2013). The Influence of Affective and Cognitive Arguments on Message Judgement and Attitude Change: The Moderating Effects of Meta-bases and Structural Bases. *Psychology Health*. Vol. 28, 2013, Issue 8, pp895-908
- [55] Rahimi, S. (2014). *Social comparisons in teachers: Effects of adjustment emotions*. Department of Education and counselling Psychology. McGill University. Montreal.
- [56] Rahimi, S., Hall, N. C., Wang, H and Maymon, R (2017). Upward, Downward and Horizontal social Comparisons: Effects on Adjustment, Emotions and Persistence in Teachers. *Interdisciplinary Educational Psychology*. DOI: InterdiscEduPsychol/10
- [57] Ricciuti J. E. (2014). *Group think: A significant threat to the homeland security of the U. S .* Retrieved from: <http://hdl.handle.net/10945/44650>
- [58] Riccobono, F., Bruccoleri, M. & Globler, A. (2015). *Groupthink and project performance: The influence of personal traits and interpersonal ties*. Retrieved from: <https://dx.doi.org/10.1155/2016/8649132>
- [59] Ruto, Z. J. and Ndaloh, A. M. (2013). The impact of secondary school teachers' attitudes and challenges on the teaching and learning of history and government in Wareng District, Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies*. Vol. 4 No. 2. Retrieved from: <https://www.questia.com> 4/21/18
- [60] Symeonidis, V. (2015). The status of teachers and the Teaching Profession: A Study of Education Unions. *Education Research Institute*. 5 Boulevard du Roi Albert II, B-1210 Brussels, Belgium, [www.ei.org](http://www.ei.org)
- [61] Soibanca, E. (2016). Attitudes of teachers towards the teaching profession. *Journal of Research in Humanities and Social Sciences*. Vol4. Issue 6 (2016). Pp 103-105
- [62] Swol, L.V. (2009). Extreme Members and Group Polarization. Retrieved from <https://www.researchgate.net> Doi.10.1080/15534510802584368
- [63] Tenbrook E. (2016). *Social comparison: Dimensional influences on academic and occupational choice*. Graduate theses and dissertations. Retrieved from: <http://lib.dr.iastate.edu/etd/15176>
- [64] Ueno T. & Yokogawa K. (2017) The role of social comparison in group polarization phenomenon. *The Japanese Journal of Experimental Social Psychology*. Vol.21. issue 2 pp167-173 Retrieved from: <https://www.jstage.jst.go.jp>

**International Journal of Novel Research in Education and Learning**

 Vol. 5, Issue 3, pp: (36-72), Month: May - June 2018, Available at: [www.noveltyjournals.com](http://www.noveltyjournals.com)

- [65] Utz, S and Muscanell, N (2018). Pride but not Envy mediates the Effects of System generated Achievement Messages on motivation. *Frontiers in Psychology*. Vol. 9, DO -10.3389/fpsyg.2018.00628
- [66] Van Kleef, Berg & Heerdink (2015). Persuasive Powers of Emotional expressions on attitude formation and change. *Journal of Applied Psychology*. Retrieved from <https://www.researchgate.net/publication/280556753>
- [67] Vaz, Wilson, Falkmer, Sim, Scott, Cordier and Falkmer (2015). *Factors associated with primary school teachers' attitudes towards the inclusion of students with disabilities*. PLoS ONE 10 (8): e0137002. From <https://doi.org/10.1371/journal.pone.0137002>
- [68] Wang D., Zhu, L., Maguire, P., Liu, Y., Pang, K., Li, Z. & Hu, Y. (2016) The Influence of Social Comparison and peer group size on risky decision making. *Frontiers in Psychology*. Retrieved from: <http://doi.org/10.3389/fpsyg.2016.01232>
- [69] Wanderi, P. G. (2015). *An assessment of teachers' attitudes and their commitment to inclusive education settings in Bahati sub-county, Kenya*. Univerity of Oslo, 2015.
- [70] Westwood, S. J (2015). The Role of persuasion Deliberative Opinion change. *Political Communication*. Vol. 32:4, pp 509-528. Retrieved from: <https://www.researchgate.net>
- [71] Webster, A., McNeish, D. Scott, S., Maynard, L. & Haywood, S. (2012). What influences teachers to change their practice? A Rapid review. *Centrefor Understanding Behaviour Change*. Retrieved from: [www.cubec.org.uk](http://www.cubec.org.uk)
- [72] Woerkom, M. & Sanders, K. (2010). *The romance of learning from disagreement. The effect of cohesiveness and disagreement on knowledge sharing within teams*. Retrieved from: <http://cat.inist.fr/?modele=afficheN&cpsid=22325900>
- [73] Yperen N. W. V & Leander N. P. (2014). The overpowering effect of social comparison information: On the misalignment between mastery based goals and self-evaluation Retrieved from: <http://www.rug.nl> on 5/6/17
- [74] Yperen, N.W.V, Brenninkjeimer, V. and Buunk, A.P (2017). People's Responses to IUpward and Downward Social Comparisons: The Role of Individual effort –performance Expectancy. *British Journal of Social Psychology*. Vol.45(Pt3):519-33. Retrived from <https://www.researchgate.net> on 1/5/2018
- [75] Zeitoun, H. H. (2017). *The effect of Written Persuasive Communication on Changing Attitudes of Egyptian Preservice Biology Teachers towards Teaching Evolution*. Retrieved from <https://catalogue.nla.gov.au/Reord/5452122> on 5/14/18
- [76] Zell, E and Strickhouser, J.E. (2015). Self-evaluative Effects of Dimensional and social Comparisons. *Journal of Experimental Social Psychology*. Retrieved from <http://dx.doi.org/10.1016/j.jesp.2015.03.001.0022-1031>
- [77] Zhu D. A.(2013). Group polarization on corporate boards: Theory and evidence on board decisions about Acquisition of premiums. *Strategic Management Journal*. Retrieved from: <http://onlinelibrary. Doi.org/10.1002/smj.2039>.