INFLUENCE OF SCHOOL-BASED ENVIRONMENTAL FACTORS ON TEACHERS' DISCRETIONARY WORK EFFORT IN PUBLIC SECONDARY SCHOOLS IN ISIOLO COUNTY, KENYA

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DECLARATION AND RECOMMENDATION

Declaration

This thesis is my original work and has not been presented for a degree or any other award in any other University."

Sign_____   **Date** -------------------

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Recommendation

We confirm that the candidate carried out the work reported in this thesis under our supervision.

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DEDICATION

This thesis is dedicated to my parents late Jonah and Tabitha Makero, to my children; Muriel,

Dennis, Nana and Venus. Hope this inspires you more.

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ABSTRACT

The premise for this study was discretionary work effort. Work effort that an employee could give voluntarily without expecting rewards or recognition from the reward system. Organizations including schools, consider employees' work effort as a critical factor towards achieving market competitiveness and future sustainability. Understanding how to manage employees' discretion, adopting a workable school environment, nurturing new innovations and maximizing short-term profits, is an evidence of managers ensuring viable future for their organizations. The purpose of this study was to determine the influence of school-based environmental factors on teacher's discretionary work effort in public secondary schools in Isiolo County, Kenya. The study focused on the influence of teaching and learning resources, the principal's leadership style, teachers work characteristics and the influence of school culture on teacher's ability to expend discretionary work effort. Literatures show that research on employee discretionary work effort is still in its initial stage hence, a need for more studies is evidence especially on academic sector. This study was grounded on Maslow's hierarchy of needs theory which provides a general framework viable for employee's professional development. The study adopted mix-method research design since it involved selection of a sample from a large population of subjects, application of both questionnaires and interview schedule as research instruments for data collection was affected. Forty eight principals, 720 teachers and two county directors constituted the target population of 770 individuals. Using 30% criteria, through simple random sampling, a sample of 18 principals, 216 teachers and two county directors purposively sampled was determined totaling to a sample size of 236 participants. Data from principals and teachers was gathered by use of questionnaires while interview schedules were used to get information from both Directors. Research instruments prepared were pre-tested using test-retest to ensure their validity and reliability. Cronbach's Alpha level of above 0.7% for all sentiment was realized. This study adopted both descriptive and inferential statistics to analyze data collected. Analyses show positive and significant relationship between all the independent variables and dependent variable at a positivity rate of 52.7% with work characteristics at 84.74%, school culture at 81.5%, teaching and learning resources at 76.5% and leadership style at 64.30%. Therefore, all the null hypotheses were rejected. The findings will provide TSC with strategies to enhance teacher management processes, provide useful information on how to manipulate school environmental factors to induce teachers' discretionary work effort, add to existing literature on school environmental factors and teachers discretionary work effort. Finally, the findings will broaden teachers' knowledge on the benefit of deriving discretionary work effort from work environment. It was recommended that employers should ensure adequacy of teaching and learning resources, principals and managers should practice blended leadership styles and TSC should ensure teachers are conversant with emerging teaching and learning pedagogies. Finally, it is recommended that both principals and teachers should adopt values, practices and work habits that provide unique work characteristics.

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ACRONYMS AND ABBREVIATIONS

ANOVA   Analysis of Variance

ASAL   Arid and Semi-Arid Lands

CQASO   County Quality Assurance and Standards Officer

DWE   Discretionary Work Effort

HR   Human Resource

KCSE   Kenya Certificate of Secondary Education

MoE   Ministry of Education

NACOSTI   National Commission for Science, Technology and Innovation

OB   Organizational Behaviour

SCDE   Sub-County Director of Education

SPSS   Statistical Package for Social Sciences

TSC   Teachers' Service Commission

UNESCO   United Nations Educational, Scientific and Cultural

                 Organization

1.1 Background to the Study

Discretionary work effort is the inner drive towards employees work engagement that is known to affect individual performance and organizational effectiveness. Employees motivated by discretion, do not work for recognition and often become organizational assets, because they easily facilitate achievement of organization objectives without necessarily increasing the cost of achieving them (Morris, 2014).Discretionary work effort is the dynamic employment of skills and desire to achieve expected outcomes. The benefits of employee's discretionary work effort involves continuous school improvement, adaption to new innovations, desirable employees work characteristics and ability to solve institution problems easily. It also includes collaborations among colleges that enable the institution to accomplish and initiate desirable projects (Chung, 2018).

For many years, institutions including schools have grown interest in understanding what employees think and feel about their organization and what make some expend more work effort than what is minimally required, while others do the necessary(Grissom & Bartanen, 2019). In the modern workplace scenario, school managers need to find the determinants of employees' discretionary work effort and factors that influence them to go an extra mile while executing their duties at their place of work. The necessity to understand work environment characteristics of employees becomes evident if organizations need to meet their objectives. Discretionary Work Effort (DWE) is that extra effort, that an employee gives, which is voluntary and beyond the minimally required to avoid reprimand or dismissal (Van der Voet & Vermeeren, 2017).

It is the desire of every manager to have employees who are proactive and can facilitate achievement of organizational goals without necessarily incurring unnecessary expenses. Although teachers or employees discretionary work effort is perhaps the ultimate desire for every organization and institution, literature show that school managers have hardly done anything significant to induce their employees' discretionary work effort. Instead, great effort is directed to school outcome at the expense of cultivating factors that would influence teachers' discretion for ultimate institutional effectiveness (Morris, 2014). While early motivational researchers conceptualized on how motivational forces affected broad measures of work outcomes, this study focuses on how specific components of school-based environmental factors would motivate employees to enhance, or holdback discretionary work effort (Morris & Douglas, 2017).

Schools and institutions are moving from the traditional learning methods towards a more complex and constantly changing learning environment. The uncertain and less predictable educational environment, with limited time to prepare for formal learning programmesare greatly affected by emerging global policies and pedagogies that require teachers to voluntarily give extra work effort for organization to survive. Therefore, employees need to adapt to new strategies and emerging education pedagogies while focusing on challenges and learning needs necessary to support educational outcomes.

Across the globe, education systems have had to contend with sporadic closures and inequitable access to education technology, deep challenges in maintaining teachers' physical and emotional health, and at the same time paying attention to new innovations

and global education emerging issues that have affected institutions resulting to poor outcomes in their national examinations (Grissom & Bartanen, 2019).

A study in England by Kortman et al (2014) on employees' discretionary work effort, observed that to keep employees on board, management provided them with family leaves, good pay and child care centres. These provisions kept employees motivated and it influenced their level of their work engagement. Accordingly, Berens (2013) opined that when employees were provided with the necessary working tools they portrayed behaviour of an engaged workforce.

The influence of reward motivation in the United Kingdom (UK), involving 10,000, teachers revealed that an organization concerned with employees' wellbeing, including health and family friendliness, was a key drive to discretionary work effort of teachers. Ugwu et al. (2014) also observed that employees' discretionary work effort was influenced by a government that instilled fundamental strategies including; clear expectations, timely feedbacks on emerging information and provision of professional development opportunities as key drives to employee's engagement and discretionary work effort.

Harvard School of Business Review (Herzberg, 2003) and the Academy of Business Management in America by Korzynski (2013) pinpointed the importance of motivating working environment to organization performances. The study opined that environmental factors that influenced teachers' discretionary work effort vary depending on time and situations. Hence, the study advocated for a workable environment that voluntarily induced teachers' or employees' motivation to hold their

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discretionary work effort high. Organizations where employees perceive and have effective work environment were highly motivated, got more engaged in their work and made activities in the organizations happen. This, more often than normal work engagement, was conceptualized as an aspect of discretionary work effort. Analysis also noted that lack of self-driven discretion among employees was the greatest challenge in educational sectors and some employees felt underutilized and unrecognized. The findings affirmed that investing more on employees 'wellbeing and creating opportunities for challenging work environments induced discretionary work effort and kept employees engaged (Ferndale & Murrer, 2015).

In China, a research on factors that influenced teachers' motivational level in public secondary schools, found out that teachers were motivated by conducive working environments that comprised of increased employee's motivation, positive communication with employers at the workplace and listening to their problems. Teachers were found to be more engaged when their principals gave them time to respond to their problems not only responding to their domestic calls, but also by making sure that they addressed their problem individually. On a similar study by Otega (2011) findings show that organizational ability to meet employees' basic satisfaction were indicators of work engagement, and great influenced their commitment at work place. Motivated employees freely gave their discretion and improved organizational outcomes.

Studies by Damian (2012) and Davili (2008), on factors impacting students' outcomes in secondary schools in India, concurred with (Otega, 2011) that teacher's motivation

directly influenced students' learning outcomes which was a direct facet of discretionary work effort. Learning outcomes was considered as an indicator for teachers' work engagement; hence, inducing their discretionary work effort was critical to overcoming performance bottlenecks. The study also examined effect of non-monetary work environment factors including work recognitions, promotions and special leaves on employees' discretionary work effort within the higher education sector. The analyses show that teachers were motivated to go an extra mile when their employers recognized their effort and involved them in making decisions. However both employees and the employer got demotivated and their discretionary work effort minimized when these motivations become monotonous.

In Australia (Anitha, 2014) on a study to identify factors that influenced employees' motivation, found out that studies on employees work effort and organization performance was adequate in the field of organizational behaviour and economic perspective, however, there was shortage of information on factors influencing employees' discretionary work effort especially in academic sectors. The findings show that professional commitment and employee willingness to be more engaged influenced discretionary work effort of teachers within the higher education sector. Although it has not been explicitly tested and needed to be explored, organizations need identify situations that support employees work effort. The results also supported work description, employee's work characteristics and organisational factors as having direct influence on employees' work characteristics (Adegbuyi et al., 2015).

In South Africa findings on how work environmental factors influences employees' work effort, identified that employees complained of poor and insecure working conditions work pressure and work setting (Armstrong, 2007). The study cited creation of tailored incentives and employee recognition as solutions to motivating work effort and individual discretion. Another study by Emenike (2013)on factors influencing teacher's productivity in Nigeria, observed that working conditions and in-service trainings were fundamental to employees' discretionary work effort and organizational outcomes. Emenike (2013)emphasized on the importance of employees' work effort and the willingness to freely give their discretionary work effort as an evident for organizations stability and best outcomes. The study pinpointed the importance of personality and organizations work characteristics that includes principal's supports and co-worker's relationship in influencing work motivation and discretionary work effort at work place. Tomer (1981) cited by Morris (2017) extended on Leibenstein model to include work environmental elements and factors that create opportunities for growth and personal development that were virtualized as enhancers of motivation great work effort at work place.

In Senegal, Ousmame (2013) observed the influence of emerging technology on stability and sustainability of learning institutions show that employees' discretionary work effort was a pivotal human capital for all organizations and remained the remedy for good organizational outcomes. Accordingly, Domark and Tawa (2012) observed that in-service training (INSETS)enhanced teachers work engagement and improved their working environment. The study recommended attractive wages, good remuneration and motivation as central to teachers' discretionary work effort and organizational best outcome. Findings to investigate factors that motivate employee

work engagement in Rwanda, affirmed that teachers were motivated by feelings of self-worth and recognition by co-workers .Support and recognition of work done was identified as a strategy to motivate and influence employees to expend more work effort.

A research survey in Kenya (RoK, 2013) noted that lack of, or ineffective on-job training denied teachers' opportunities to enhance their skills and results were poor school outcomes. According to the study, promoting teachers' development, insets to modern pedagogical strategies and adequacy of resources influenced their willingness to invest more work effort. This was also cited by Asim (2013) that training of teachers was a source of motivation and induced their ability to be more engaged. According to Asim (2013),on-job training (INSET) kept teachers updated on emerging pedagogical, new teaching strategies and helped them to adapt to new educational policies that influence their ability to expend more work effort.

A study by UNESCO (2013) on survey of teacher motivation and school performance in Kenya observed that resources to motivate teachers to work to their peak were limited. The study concluded that managers needed to identify alternative ways to influence and sustain the direction of their teachers' discretion in order to keep them motivated. Ng'eno (2006) also noted that resources were limited and alternative measures to induce employees discretionary work effort were required to maximize institutional performance.

Findings of a study of public schools in Kenya by Odul (2012) observed that just like in other countries, Kenyan public secondary schools experienced teachers' disengagement

and fatigue in which irregular work attendance was familiar. The study indicated that professional documents were inadequately prepared, there was poor supervision of school extra-curricular activities, class work was inadequately attended to and learners were literally left on their own. These factors highlight the scenario in public secondary schools in Kenya and the consequences are poor national examinations outcome in most schools in the country. Koech (2013)observed that motivational factors were just not enough to induce teachers' discretion and advocated for work environmental conditions that attracted teacher's discretion. The study emphasized on new ideas, achievement of appropriate responsibilities and freedom to use time well, as determinants of extra work effort. Provision of teaching/learning resources and reduced bureaucratic procedures motivated employees to expend more work effort. The study concurred with Kortman et al. (2014). Asim (2014), Berens (2003) & Reimers (2003) all seem to agree that provision of working resources and reduced bureaucratic procedures motivated employees to go an extra mile

Several Studies on factors that influence employees' work effort at the work place have been conducted in developed countries and much literature published. The results have shown a close relationship between teachers' discretionary work effort and school learning environment. These studies, however, have focused on factors influencing employees' level of motivation and work expended within that period of motivation, neglecting factors that would consistently influence employees to expend more work effort (Fernandez, 2014). The consistency of work effort behaviour during and after the influence of motivational period was a factor of concern in this study. What influences employees to expend more work effort above what is required at work place while

others do the minimum required has not been researched well especially on academic sector and this is the premise of this study.

Though there has been noticeable increased consultation on human resource concepts of employee engagement and extra role behaviour (Morris, 2017)there is still a shortage of studies on academic literature on the determinants of employee work engagement construct, especially in developing countries (Anitha, 2014). Thus, understanding what motivates employee to expend more work effort or to work near their utmost level is crucial for all institutions, business and organizations today. To work at their highest level and get more engaged for organizations' effectiveness, employees must be motivated to voluntarily expend their discretionary work effort, work effort that is free and beyond the minimally expected for appraisal or reward. Employee work engagement is an evidence of a higher than normal level of employee's work effort reflected within the normal work situation (Morris, 2017).

Findings on influences of school environmental factors and teachers' discretionary work effort show that much have been researched in developed countries on organizational behaviour and economic perspective but little evidence of such literature is available on academic sectors. It is observed that minimal of such studies have been conducted in developing countries. However no such study is known to have been conducted in Kenyan public secondary schools and in Isiolo County in particular. This suggests that a literature gap on the influence of school environmental factors and teachers' discretionary work effort exist and need to be investigated. Despite that the county shows an improvement of 0.23 from 2.780 reflected in 2018 schools outcome, the

phenomenon presents a number of schools in the county showing consistent improved outcomes, while others show average improvement, however, majority of the schools reflected continuously and extremely poor outcomes. In this scenario, putting aside all other factors, it emerged that there could be school based factors that probably contributed to these variations. This made it evident that a knowledge gap existed which the researcher was out to fill by closely examining school based-environmental factors that probably have been contributing to these variations and that may be influencing teachers' ability to work hard and effectively. Schools in Isiolo County.Table 1.1

Table 1.1

KSCE Analysis for Isiolo County Secondary Schools between 2015 and 2019

	B+	B	B-	C+	C	C-	D+	D	D-	E	X	M.S
2019	4	8	19	29	71	112	287	513	182	0	11	3.01
2018	0	2	12	25	36	82	322	489	134	0	10	2.78
2017	1	3	9	13	34	82	322	455	79	0	6	2.98
2016	2	1	11	15	41	82	265	382	87	0	9	3.12
2015	0	5	22	63	149	178	223	78	3	0	10	4.39
TOTAL	7	**19**	**73**	**145**	**331**	**536**	**1419**	**1917**	**485**	**0**	**46**	

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Additional Statistics provided by County Quality Assurance and Standard Officer (CQASO) in Isiolo County (Table 1.2) indicates that out of 4,860 students that sat for the secondary school national examinations between 2015 and 2019, only 244 (5.02%) managed to score a mean grade of C+ and above. This is an indication that majority of other students, approximately 867 (17.8%) with main grade of C and C- either joined diploma colleges or polytechnics. Most students, 3703 (76.19 %) scored a mean grade of D and below were vulnerable to reverting back into the society with minimal skills to solve their everyday problems. It was also realized that 46 (0.945%) did not get their results for the said examination between 2015 and 2019. Considering the results observed on Tables 1.1, it is a clear indication that school outcomes in Isiolo County were of great concern and unless drastic measures were put in place, secondary school graduates from Isiolo County secondary schools will remain vulnerable and become public liabilities. In addition, the influence of these results on the county's development agenda is wanting. While the contribution of work motivation and discrertionary work effort was not clearly stipulated as to how it had influenced academic performance in most studies, it was clear that schools needed more than just motivation to keep teachers more engaged and to tap their discretionnary work effort for schools to be effective and efficient. This calls for an alternative method of influencing teachers discretionary work effort for organization best outcome. These results clearly indicate that teachers level of dedication, engagement and their motivational level to induce discretionary work effort was a realiy if schools needed to do weel academically. Environmental factors are broad, but this study view schools as an entities that is shaped by similar school environmental factors.

Teachers' discretionary work effort culminate to all that is done voluntarily in the school to achieve best outcomes, this includes, classroom activities and extra-curricular activities, among others. However, basing on the present situation, there is a concern on the relationship between work environmental factors and teachers' ability to expend more work effort at work place. These were the factors that needed to be evaluated in most organizations and education sectors, particularly in Isiolo County.

1.2 Statement of the Problem

Discretionary work effort is a critical aspect for organization to be effective and meet their goals. Across the globe, leaders and particularly school principals are struggling to identify strategies to promote work effort of their employees without which organizations would be placed in a risky position. Many organization including schools manage the work effort of their employees by provision of extrinsic and intrinsic motivations to keep them engaged. This entails that employers and managers have to incur expenses in order to maintain the motivational level of their employees for best outcomes. It is certain that the desire of every manager is to have employees who are proactive and can facilitate achievement of organizational goals without necessarily costing the organization unnecessary expenses. Quality outcomes require high performing employees who can expend discretionary work effort voluntarily and go an extra mile in performing official duties.

Information gathered from Isiolo County Education Office (2019) indicates that secondary schools outcomes were perennially poor characterized by low students retention as shown on table 1.2 page 13, indiscipline cases and posting poor academic results. The outcome triggered the attention of all educational stakeholders to best understand the reasons for the

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perennial poor results achieved from different facets of school outcome in the county. Strategies have been designed as precursors of school best performance; such as provision of instructional materials, improved infrastructure, ensuring quality of teachers' remuneration, motivation of teachers and improving teacher -students' discipline. Although the entire foregoing has been provided, schools in Isiolo County continue to post wanting academic outcomes. School outcome is as a combination of many factors; including leadership characteristics, co-workers' behaviour, influence of inside and outside school environments factors, teachers' motivation, infrastructure and instructional materials. However, most of the above items have conspicuously been evaluated in relation to school outcomes except teachers' commitment and level of work effort expended.

Currently, no sufficient literature is available on the contribution of any particular school environmental factors and academic outcomes in Isiolo County, and indeed the relationship between school-based environmental factors and teachers' discretionary work effort. Even though the rest of the variables have been extensively researched, factors that influence employees' motivation to unleash and expend voluntary work effort at work place has not been researched much. Despite that discretionary work effort is important for influencing school outcomes, there is minimal information available on how managers could motivate and sustain their employees' discretionary work effort with minimal rewards provided. What motivates employees to voluntarily give extra work effort at work place has not been much researched and to the understanding of the researcher, no research has been done on the influence of school-based environmental factors in Isiolo County by the time of this study. This necessitates investigation to identify the relationship between school

environmental factors and teachers' discretionary work effort in public secondary schools in Isiolo County.

Despite that, most studies on employee engagement have focused on motivational factors; little evidence according to investigator's understanding is available on research conducted on the influence of school environmental factors and teachers' discretionary work effort in Kenya and in Isiolo County at the time of this study. Literature available indicated dismal qualitative research on school-based environmental factors and how they influences or inhibits employee discretionary work effort, especially in higher education sectors in Kenya, and in Isiolo County. Empirical evidence demonstrate that motivated employees expend more discretionary work effort, and means better organizational outcome, this is not so in Isiolo County where educational sector experiences diminishing national examinations outcomes and a down trend in all other school activities. This leaves a gap for more research on the influence of school environmental factors and teachers discretionary work effort and therefore the premise of this study.

1.3 Purpose of the Study

This study was carried out to investigate the influence of school environmental factors on teachers' discretionary work effort in public secondary schools in Isiolo County, Kenya.

1.4 Objectives of the Study

The study focused on four specific objectives;

1. To examine the influence of teaching and learning resources on teachers' discretionary work effort in public secondary schools in Isiolo County.

2. To determine the influence of principal's leadership styles on teachers' discretionary work effort in public secondary schools in Isiolo County

3. To assess the influence of teachers' work characteristics on discretionary work effort in public secondary schools in Isiolo County.

4. To examine the influence of school culture on teachers' discretionary work effort in public secondary schools in Isiolo County.

1.5 Research Hypotheses

The following hypotheses of this study were set to test the statistical significance of the relationship between school environmental factors (the independent variables) and teachers' discretionary work effort (the dependent variable).

H_{o1} There is no statistical significant relationship between teaching and learning resources And teachers' discretionary work effort in public secondary schools in Isiolo County.

H_{02} There is no statistical significant influence of principals' leadership styles on teachers' discretionary work effort in public secondary schools in Isiolo County

H_{03} There is no statistical significant influence of teachers work characteristics on teachers discretionary work effort in public secondary schools in Isiolo County.

H_{04} There is no statistical significant influence of school culture on teachers' discretionary work effort in public secondary schools in Isiolo County.

1.6 Justification

The rationale of this study was gleaned by the consistence of poor academic outcomes in public secondary schools in Isiolo County, Kenya. Outcomes show a continuous downtrend of national examination results in most secondary schools in the county.Despite measures

instituted by the stakeholders to improve teachers' and students work effort for best school outcomes, the perennially poor results had become a concern to educational sectors and general stakeholders to find out why the persistence of poor schools outcome in the county secondary schools compared to other counties that share similar geographical conditions.Poor schools outcome which had become a significant factor of concern in educational institutions sectors in Isiolo County prompted an investigation as to what causes the differing outcomes in the schools. Introduction of measures to improve teachers' motivation and to sustain employees' work effort failed due to environmental factors and other factors that are adequate of justification in the County. This gap on what is causing the great different between schools' outcome, prompted a study to investigate what factors within the work environment that significantly influenced teachers' level of motivation that could be enhanced to motivate them to maintain their extra work engagement.

Measures to improve teachers' level of work engagement in most institutions were rooted in provision of intrinsic and extrinsic motivation which literature has proved to be only effective between the motivational periods. Employee motivation aims at enhancing the level of work effort and improving the educational outcome. However, educational outcomes in most public secondary schools continue to be a concern in Kenya and Isiolo County in particular despite all the measures instituted to keep employee motivated (Educational office, 2019). Therefore, the intent of this study was to find out what factors within the school environment influenced teachers' level of work engagement, which is considered as a direct facet of employee's extra work effort or discretionary work effort with the aim of assessing their effect on school outcomes in Isiolo County.

1.7 Significance of the Study

Recommendations made will enhance further definition and understanding of discretionary work effort. The findings will also emphasize on the role of school environmental factors in promoting teacher's work effort for better school outcomes. The study will also provides useful information to school principals on the extent to which they need to manipulate the school environmental factors to induce and maintain teachers' discretionary work effort for improved school outcomes. Practically, the findings will help formulate strategies to help secondary school principals on teachers' management processes. The results will also contribute valuable information to Teachers' Service Commission and Ministry of Education, principals and teachers in helping them to identify strategies to motivate their teachers to voluntarily expend extra work effort at their work place. The knowledge gained will be useful in formulating strategies to modify attitudinal aspects of secondary school principals and managers when working with employees' discretion for best school outcomes. Finally, the findings will broaden employees understanding that motivation driven from the organization direct is natural than insets and overtime rewards.

1.8 Scope of the Study

The study confined itself to identifying the influence of school environmental factors on teachers' discretionary work effort in public secondary schools in Isiolo County. Data was collected from county directors, principals and teachers in public secondary schools in Isiolo County. Whereas there are other variables that influences employees work effort, the study concentrated its investigation to only research on the influence of teaching and learning resources; leadership styles; teacher's own work characteristics and school culture. These school environmental factors were believed to be variables of interest because they

are dominant factors in every organization and are believed to positively or negatively motivate teacher's ability to expend more work effort. Other factors that probably influenced teachers' ability to expend discretionary work effort, such as parental involvement, intrinsic and extrinsic rewards were not covered in this study because these are factors that have been intensively researched and outcome generated.

1.9 Limitations of the Study

The study restricted itself to analyzing the effect of environmental factors (teaching and learning resources, leadership characteristics, teachers work characteristics and school culture) on teachers' discretionary work effort in Isiolo County. Source of information were limited to school principals, teachers and county directors. More information could have been collected from students, on the influence of school environmental factors; however, there was limited time. The study focused only on selected environmental factors and their influence on teachers' ability to expend extra work effort. Data collected on school environmental factors was limited to availability of teaching and learning resources, leadership characteristics, teacher work characteristics and school culture. The study was also limited to application of hierarchy of needs theory. The theory denotes a gradual motivational process of and employee. The theory emphasizes on self-motivation compared to other theories that are limited to motivational rewards.

The study experienced scarcity of related literature on the influence of school environmental factors and teachers discretionary work effort from local literature and mostly depended on information from other countries for the purpose of its literature review. Information from the respondents was collected by use of questionnaires and

interview schedules, however, these tools have their own limitations in provision of data. However the researchers provided confidential assurance of all the data collected and encouraged the participants to participate voluntarily since the study was purely for academic purposes.

1.10 Assumption of the Study

This study assumed that school environmental factors had an influence on teachers' work effort in public secondary school teachers in Isiolo County. It was also assumed that teachers' discretionary work effort was as a result of their individual discretion. The study also assumed that the effort exerted on work performance depended on the influence of school environmental factors on teacher's level of discretion. Essentially the root assumption was that all employees would have the motivation to unleash discretionary work effort expected at work place.

The study also assumed that respondents gave valid information and it was the responsibility of the employer to induce discretionary work effort of their employees. The study also assumed that it was the duty of institutional principals and school management to work as a team to ensure that factors that trigger useful work effort were in place.

1.11 Operational Definition of Terms.

The following words used in this research assumed the meanings or definitions indicated against them;

Discretion: Freedom and power to make individual judgments and decisions on what should be done in a particular situation.

Discretionary work effort: High engagement at work place or voluntary work effort that is not regulated by laws and beyond what is required.

Employee: In this study a teacher was mostly referred to as an employee of Teachers' Service Commission.

Exigency: A demand or a need that is required in a particular situation.

Human Resource: In the context of this study, human resource refers to the personnel In the human resource department that manages employees' wellbeing.

Morale: This is the attitude that a worker has towards the work he/she is engaged in, towards the organization one is working for and towards his/her colleagues.

Motivation: A drive or a force that causes a psychological influence (either positive or negative) to an individual to react or behave in a certain way.:

Salient: In this study, salient referred to a matter of concern or something that does not lose its importance.

School Culture: These are the school practices, beliefs created and re-created over a period of time that give the school its identity. They include dos and don'ts of the school which govern the social relationships within the school.

School outcome: The consequence of what is done by the teacher within the school environment to accomplish the expected outcome

School environmental factors: Refers to all that is found in a school that can affect school outcomes.

Teachers' motivation: This is an inner force that keeps teachers more engaged towards a certain goal influenced by reward system.

Teaching/learning resources: These are physical/non-physical resources that teachers use for delivering content to the learner

Teachers' work characteristics: personal behaviour and emotional commitment that an employee display towards work and other colleagues.

Work effort: High employee engagement and energy expended towards completion of a task.

Work environment: All that is included in the outside and inside school features that generate drives to which employees may respond either positively or negatively.

Work motivation: Energetic forces that originates from an individual that influence work related behaviour that dictate its form, direction, duration and intensity

Working conditions: This refers to existing situations in employees work, including those factors such as amenities and quality of physical environment

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section provides detailed discussion of literature reviewed addressing the influence of school-based environmental factors on teachers' discretionary work effort in public secondary schools in Isiolo County, Kenya. Observed literature is presented, followed by theoretical and conceptual framework and presented according to the major variables of the study. First, it begins with conceptualizing discretionary work effort followed by a review of literature on teaching and learning resources, leadership styles, teachers' work characteristics and the influence of school culture on teachers discretionary work effort. Finally, a chapter summary of all the variables is discussed followed by a discussion on theoretical and conceptual framework respectfully.

2.2 Conceptualization of Discretionary Work Effort

Discretionary work effort (DWE) often referred to as "going the extra mile", is the difference between what one has to do, and what one wants to do in the workplace that is not fixed by rules. The word 'discretion' has several definitions, varying from uncompromising emotional condition of making decisions which are entirely within the discretion of an individual, or being involved and committed. The concept of discretionary work effort serves as a collective term for different aspects of bureaucratic practice including work engagement; work motivation and extra role behaviour associated with employees' work attachment. However, there is little documentation on how to best implement and have employees truly engaged at the work place and achieve great experiences for both employee and the

organization. According to Hupe (2013), observed that it was the extent of freedom and emotional connection that drove individual thoughts in making alternative choices among possible factors that trigger behaviour when implementing school rules.

Employee' motivation and discretionary work effort are not synonyms. Discretionary work effort refers to emotional commitment of an employee that is not influenced by motivational rewards but voluntarily expended. On the other hand, motivation is the desire of doing and giving more work effort in correlation to set agreement between the employee and the employer. Employees who get more engaged were said to perceive discretion as a reality and possess the desire for discretionary work effort even before they could usually use it. The desire to perform by voluntarily expending more work effort provides best results, and by itself is a source of employee internal self-discretion (Hupe, 2013). Discretionary work effort can also be referred to as the ability of an individual to act without causing embarrassment, too much attention and right to make choices.

Studies done on the influence of work effort affirms that great work effort was related to employee motivation.The level of teachers' work effort was found to significantly influence organizations' outcome, hence, motivation level of an employee and job satisfaction was statistically found to be related to the level of discretionary work effort expended (Mishra et al., 2014).

Grissom and Bartanen (2019)examining leadership characteristics and teacher turnover in America observed that effective leadership style reduced teacher turnover and influencedtheir ability to expend more work effort. The findings confirmed that employees were not only motivated by monitory rewards but considered organizational culture,

leadership and management factors that understood them and accord them time to pursue personal developmental goals, as key predictors of motivation that enhanced their discretionary work effort in making individual decisions. According to Morris (2017) and Douglas (2017), most studies conducted on employee engagement and extra work behaviour focused on the relationship between motivation as an independent variable and organizational outcome as the dependent variable, these findings concentrated on the duration that an employee could stay motivated to accomplish the tasks and have an influence on organizational outcomes. Analysis indicated a correlation between employees' discretionary work effort and organizational outcome and noted that employees would stay engaged as long as their feelings of motivations existed.

A study on the influences of intrinsic motivation and school outcome in Argentina (Mishra et al., 2014) observed that teachers were hardly motivated when their intrinsic motivation was rewarded. The study established that the desire for extrinsic motivation gradually crept in and it was common to find learners abandoned in classes, their books hardly attended to effectively and increased absenteeism of teachers was evident. The results called for organizations to put in place various methods that required minimal (intrinsic and extrinsic) or no rewards to induce teachers' motivation and discretionary work effort for the benefit of organizational outcomes. Work intensity was seen to be a stronger predictor of great employee work engagement. The author concluded that discretionary work effort was related to individual ability to make choices and the desire to accomplish responsibilities free from constrained internal or external forces.

The greatest challenge ahead of present day institutions is the declining level of enthusiasm in expending discretionary work effort in the workplace. (Kowalski, 2003) argued that literature review carried overemphasized monetary (intrinsic) and non-monetary (extrinsic)benefits as the determinants of employee motivation, hence, employees voluntary work effort remains a concern at work place today. Extensive research in the area of discretionary work effort has remained inadequate and for most educational institutions, factors that influence teachers' work effort are an afterthought as managers concentrate on identifying how to address causes for poor educational outcomes such as parental factors, entry behaviour, school policies and influence of catchment area instead of concentrating on factors that affected teachers' work behaviour and what can motivate them to give more work effort. This concurs with Vernon (2007) that employees disengagement found at work place continue to be a point of concern and unless employees are motivated to freely expend their discretion, organizational outcomes will remain a phenomenon.

Regionally, in Egypt a study to investigate factors that motivated and influenced employees' ability to expend discretionary work effort (Maha Ahmed, 2015) observed that there was a dreath in literature on factors influencing employee's work effort in higher education sector, especially in developing countries and in Africa. The study further noted that managers had applied different strategies to stay competitive and enhance employee engagement. The study, though, a considerable effort on human capital consultation was increasing;it was observed that shortage of literature on academic field was evident. The findings indicates that several studies done on employee discretionary work effort in developed countries and in Africa, mainly focused on the influence of motivation on employee work engagement and emphasized on motivating factors that motivated and

maintained the direction of employees' discretionary work effort for organization's best outcomes. Empirical studies (Van der Voet, et al., 2017) show that several of these researches have also been conducted on possible factors that influenced employee's work engagement in developed countries, however, minimal evidence of similar studies are found in developing countries, including Africa, Kenya and Isiolo County in particular, by the time of this study.

Further literature reviewed (Fernandez, 2014) indicates that extrinsic rewards were factors outside job description including rewards that drove employees' desire to work extra hard for a specific period. The study established that with everything else held constant, increased motivational rewards caused an improvement on employee's motivation and enhanced work engagement. However, thefinding of the study failed to define the determinants of employee discretionary work effort and what could probably keep them motivated to expend more work effort voluntarily. Though the influence of motivation on employees' output was clear, factors that influenced and sustained work engagement were what needed to be investigated. Understanding factors that influences and maintains the direction that enhances work effort of employees, organizations would understand what school-based environmental factors needed to be observed so as to improve and sustain a higher level of employees' motivation (discretionary work effort) which previous studies had not clearly indicated how they influenced organizational outcomes and how they could be maintained.

Odukah(2016) findings on the influence of two motivational factors; intrinsic and extrinsic on employees' work engagement in Kenya, show that intrinsic motivational factors

including successful completion of tasks and job enhancement were related to employees' motivation and not necessarily discretionary work effort. The study observed that intrinsic motivation comprised of work related factors between the employer and the employee. Analysis also indicated that feelings of extrinsically motivated work effort did not extend to voluntarily work effort. Expending more work effort after both the employer and the employee were satisfied with the work outcome expected, was what reflected discretionary work effort of the employee.

Motivated teachers gave more work effort and are party in promotion of learning procedures within the institution. Hupe (2013) affirmed that employees, who were motivated demonstrated high discretionary work effort, inspire students to learn effectively, and ensured execution of educational policies and practices as well as, creating feelings of contentment to the learners. While teachers discretionary work effort is critical to the teaching and learning processes, literature confirms that several teachers are less motivated to expend discretionary work effort, hence, they are likely to hold back work effort required for organizational best outcomes.

Van der Voet et al., (2017)indicated that the survival of every organization, schools included, is dependent on the level of employees' ability to expend discretionary work effort, the cooperation among co-workers, employee work characteristics, effective and influencing leadership styles and adequacy of teaching and learning resources are critical school environmental factors that motivate employees to go an extra mile for the benefit of organizational outcome and individual satisfaction. Employees motivated by discretionary

work effort were found to be innovative and were not influenced by intrinsic or extrinsic rewards, but found satisfaction in their work.

The continuing interest in employees' work place disengagement popularly found on organizational behaviour (OB) literature and economic perspective literature continues to be a concern to organization settings today, as to what influences some employees to put more work effort at work place while others do the minimally expected. The problem of undesirable school outcomes,(Fernandez, 2014) confirms that it is experienced in counties that present national examinations results that are below the expected standard. Discretionary work effort is depicted in desirable school outcomes and workable school environment which is not so in many counties and specifically in Isiolo County where school outcomes reflected in national examinations for many years are poor and wanting. This continues to be a concern as on whose account do some employees voluntarily dispenses more work effort, while others hardly do so. As the country is recovering from decreased period of economic stability and as resources to motivate employees become scarce due to emerging factors, schools in Kenya continuously require changing the reward systems in order to survive and meet the global economic demands placed on educational sectors. Discretionary work effort disengagement gap at work place has more widened and has become an issue of importance.

Morris and Douglas (2017) examine factors that influenced employee motivation and discretionary work effort in Australia, show that most managers were not conscious that their supervisory roles involved both consideration for a workable school environment and the dynamic relationship among school environmental factors, teachers' degree of work

effort and the level of employees' work engagement or discretionary work effort exerted. The global expectation and demand exerted on educational institutions require teachers' willingness to expend more work effort to accomplish the required task. Accordingly, the value of every organization is increasingly based on the ability of employees to learn quickly and adapt to the expectations of the organization as a crucial part of work requirement in every school/business.

For organization to thrive, employees need to focus on learning new ideas and pedagogies that motivate their work effort instead of focusing on its efficiency and effectiveness. However, Van der Voet et al. (2017) observed that for organizations to increase their resilience, drive growth and navigate world uncertainties', employees' ability and willingness to go an extra mile, while focusing on the wellbeing of the organization is necessary. Schools and institutions are moving from the traditional learning methods towards a more complex and constantly changing learning environment, less predictable with limited time to prepare for formal learning programmes, greatly affected by emerging global policies and pedagogies, require teachers to voluntarily give extra work effort for organization to survive. The findings indicated that employees need to learn new strategies and adopt emerging education policies while focusing on challenges and learning needs necessary to support educational outcomes.

Across the globe, Grissom and Bartanen (2019) noted education systems contend with sporadic closures and inequitable access to educational technology, findings affirmed the deep challenges in maintaining teachers' physical and emotional health, and at the same time paying attention to new innovations and global educational demand. The study

confirmed that emerging issues greatly affected school management and motivating employees work effort was challenged by the inadequacy of literature on qualitative research on factors influencing or inhibiting employees' discretionary work effort mostly in academic sectors.

The willingness of managers to motivate and induce the discretionary work effort of their employees has been challenged by many uncertainties including the emerging educational trends and demand experienced by developing countries, particularly in Kenya has left many employees experiencing feelings of work motivation only when the institutions are able to accord rewards. Literature show that this enthusiasms is of short term experience and employees lapses back to their normal work characteristics when the rewards are withdrawn or become monotonous, hence organization continuously struggle to keep them motivated amid organizational extra expense. While managers and principals struggle to put school environmental factors in order and at the same time compete with new challenges imposed by the unpredictable global demands and traditions, literature show that minimum effort has been expended to induce employees' work effort required at work place. In order to motivate employees' discretion, institutions must distinguish and minimize factors that hinder work effort of their employees and maximize what keeps them motivated as well as giving them opportunities for innovation and advancements (Grissom & Bartanen, 2019).

Employee discretionary work effort has been identified as an emerging phenomenon and a challenge in today's work place. With complex policies and strict regulations affecting employees, that hinder their ability to expend extra work effort, employee engagement was

perceived to be a challenge to many organizations and this aspect of employee's discretionary work effort challenges organizational management. (Albercht et al., 2015;Farndale & Murrer, 2015) all agreed that employees' work effort is a critical factor in promoting organization's intensity, continuity and productivity

Literature on what influences employees' discretionary work effort has been done in the field of organizational behaviour and economic perspectives in private sectors, but according to current situation, little literature on discretionary work effort is available in the field of academic research and school environmental factors. Despite the common interest among these studies (organizational behaviour and economic perspective) research on what motivates individuals to expend more work effort than what is minimally required, has never lost salience (Mishra et al., 2014).

Hupe (2013) affirmed that employee's work effort and time spent doing the same task was based entirely on the perceived phenomenon of interest as an outcome of the rewards expected. The study noted that discretionary work effort is about outcomes and not hours worked. It is about achieving the desired results through influencing, identifying and reducing non-institutional and non-productive organizational behaviour and the emotional commitment. The study advocated for a work environment that engaged employees' psychological and emotional commitments in order for them to voluntarily put forth more work effort at the work place. According to Hupe (2013), a conducive work environment was a source of motivation that influenced employees to voluntarily expend their discretionary work effort. Different authors define DWE as a voluntary work effort that an employee could provide without expecting any recognition. Hupe (2013) was of the opinion that time and work intensity were distinctive elements of work effort supplied and that the

distinction between the hours an employee worked and the work effort expended, defined the efficiency of employee's discretionary work effort. This notion encompassed the natural quality and skills of the employee and termed it as any extra effort voluntarily expended to improve school outcomes as discretionary work effort (Bersin, 2014).

Currently, employment contracts and good remunerations are not a guarantee that employees will work to optimum level possible, and that employers can control the rate at which an employee expend work effort at work place. Employees work effort is a requirement at any given organization, including schools and unless employees/teachers are well motivated, they typically stray away from their level of work effort and this affects school outcomes (Morris, 2017). The economists' argue that job descriptions define the hours an employee is expected to work but the contract does not generally state the amount of work effort that an employee should expend at such particular moments that one is expected to be working (Morris, 2017). In the behaviourists' literature, the continuity of any organization is determined by employees' work effort, which is an influencing factor on the overall measurement of school performance. Teachers' engagement positively or negatively influences school outcomes which measures teachers' commitment and dedication.

In most developing countries, the only evidence of teachers' work effort is the end of year (Summative) examination which is the standard measurement of school outcomes. The outcomes give employee's opportunities to vary the level of their work effort by making comparison of the extent of work effort exerted and examination outcome. However, Morris (2014) emphasizes that employees possessing DWE motivation are driven by higher emotions and psychological attachment to what they actually want to achieve with their work. The extent to which employees enjoy and believe in what they do, the greater the

engagement and more likely that employee will go an extra mile to achieve self-actualization. The focus of every organization is to have employee engagement aligned with organizational goals, and to expend work effort beyond what is minimally required by the organization (Menguc et al., 2013).Work effort and high engagement at work place, is evidence of motivated employees willing to contribute to organizational success.

Karanges et al. (2015) all defined employees' discretionary work effort as an engagement that is voluntary and unsupervised, it is the extent to which an employee is willing to be committed both emotionally and rationally within their organization. Eldor and Harpaz (2015) affirms that motivation is an aspect of discretionary work effort but employees driven by motivation are influenced by the desire of the rewards expected. This engagement and the feelings of giving extra work effort, probably diminishes with the withdrawal of the rewards or if the expectations are not met. Employees driven by discretionary work effort do not expect any reward or recognition by the reward system but display a decision to work with greater enthusiasm, diligence and creativity which points out the behaviour of a motivated employee, work characteristic that points to a direct facet of work effort. Organizational behaviour literature on discretionary work effort relates back to (Barnard, 1938) as cited by (Morris, 2017). The study perceived organizations as an association of cooperative efforts where persons willingly contribute work efforts to the system for best outcome. Morris (2017) stated that voluntary work effort, which is an employee's discretion to work extra hard and above what is expected at work place, is a key factor of organizational outcome.

In organizational behaviour literature, employee discretionary work efforts commonly constitute of duration, intense and direction of work effort exerted. (Berens, 2013) stated

that duration aspect of discretionary wok effort reflects on how much time an employee keeps trying on the same activity. Intensity refers to the level of effort an employee inserts in a given activity. According to Farndale and Murrer (2015) employee engagement, which is an aspect of employee's discretionary work effort, reflects on how hard an employee works and the amount of energy individual chooses to employ per section of time. The three dimensions of discretion (duration, intense and direction) are evident in influencing employees' level of performance. This statement was also conceptualized by Albercht et al. (2015), Farndale and Murrer (2015) all affirmed that employees' discretionary work effort was voluntarily and could not be measured or controlled by leadership style practiced. However, this study conceptualizes discretionary work effort as the ability of the employee to go beyond and above the motivation period for self-satisfaction and for the benefit of the organization. This posited that for organizational effectiveness, employees require work environmental factors that motivate them to perform the required tasks and meet organizational standards that generate stimuli to influence employees' innovation and motivate behaviour that goes beyond what is minimally expected.

Morris (2017) affirmed the parallel understanding between the behaviourists' and economists' perceptive which links the concepts of discretionary work effort to explain the phenomenon of employee's extra work behaviour as high level of employee engagement. Burnout researchers defined engagement as the blossoming of employee's discretionary work effort. However, Eldor and Harpaz (2015) defined work engagement as a state of mind characterized by vigorous energy, mental flexibility, dedication, feeling proud of individual achievement and contentment while performing task. These studies highlight discretionary work effort as voluntary work effort that employees have great control over it,

and described it as work effort that is beyond employee's minimum requirements. Discretionary work effort of employees can be influenced by many factors within the school environment (Farndale & Murrer, 2015). However, this study focused on the influence of teaching/learning resources, leadership styles, teachers' work characteristics and school culture. The study investigated the influence of these variables on teachers' ability to expend or hold back their discretionary work effort in public secondary schools in Isiolo County, Kenya.

School environmental factors are defined as comprising of all the elements that exist within and outside the school and have the ability to influence all, or part of the organization's undertakings. Every organization schools included comprises a particular work environment that determines, to a considerable degree, how its leaders respond to problems, conditions and how employees behave towards work. School environmental factors contribute to teachers' level of commitment and determination in challenging demanding situations (Meyer et al., 2012; Hupe, 2013). Regardless of the type of school, conducive work environment has been found to attract and support teachers' ability to employ more work effort.

Morris (2014) on a study focusing on discretionary work effort and employee engagement, identified factors that were prerequisite to employees' discretionary work effort and called them "Perks" and factors that negatively affected employees' ability to assume extra work effort namely "Irks". The study focused more on intrinsic and non-intrinsic motivation as primary elements of voluntary work effort. On another study the same author, Morris (2017) noted that teachers' discretionary work effort remained a concern and was of the

opinion that currently learning institutions require self-motivated employees driven by the core purpose of their appointment. The findings emphasized on intrinsic and extrinsic motivation to influence discretionary work effort of employees. Overriding all other factors, Bersin (2014) argued that influencing teachers' engagement was found to diminish with the withdrawal of motivation and emphasized on school-based environmental factors as found to have immense influence on teachers' ability to expend extra work effort. Bersin indicated that school environmental factors were broad and their influence on employee's work effort had been felt in different facets of school achievement and organizational outcomes, reflected in national examinations and other school activities which are the standard measure of employees' work commitment.

Apparently, most of these studies Morris (2017) and Odukah (2016),have overlooked the influence of critical school-based environmental factors that teachers interact with on their everyday activities at the work place and probably influences their ability to be more engaged hence, concentrated on the results which is an outcome of employees work effort which should be nurtured. School environmental factors are broad and their influence on teachers' discretionary work effort cannot be understood in one single study. Analyzing their influence on employee extra work effort provides a broad understanding of the relationship they have on teachers' discretionary work effort. However, in this study, investigation was narrowed to the influence of teaching and learning resources, influence of leadership styles, identifying the influence of teachers' work characteristics, and the influences of school culture on teachers' ability to expend discretionary work effort in Isiolo county Kenya. These factors were considered relevant to this study because teachers

and other employees in the organizations interact with them on daily basis as they carry out teaching and learning activities.

Apparently, the competitive advantage of organizations remains on the people and their willingness to expend extra work effort at work place (Addimando & Veronese, 2017).Findings show that employees are the most important factor in an organization that managers should understand what factors influences them to work effort at the organizational level as well as enable them to focus above the call of duties without the need for schools to spend significant capital. Morris (2017)opined that organizations are formed by people and their work characteristics affected organization outcome directly. In this scenario therefore, it arises the relevance of the subject: investigate school-based environmental factors characterized as influencing discretionary work effort of an employee. As highlighted above, the subject still remains incipient to researchers, employers and organizations. More so, it is a problem that is present and deserves to be investigated. It is believed that this article will contribute to closing this gap in the study of school-based environmental factors and employees' discretionary work effort.

2.3 Teaching/Learning Resources and Discretionary Work Effort

Teaching and learning resources are classified as vital organizational factors that drive employees' motivation to do more by expending work effort for best organization outcome. Teaching and learning resources have been studied widely and the outcome show that the inadequacy has dire consequences of employees discretionary work effort and school outcome.

A study targeting the modernization of employees work engagement and work place teaching and learning resources, targeting 19260 respondents in Mexico, Netherlands and USA (Farndale & Murrer, 2015) discovered that teaching and learning resources influenced employees to go an extra mile. The findings note the significance of adequate resources in motivating discretionary work effort. Despite similar observations made across the three countries, the studies advocated alternative methods to approach and engender discretionary work effort of employees.

Farndale and Murrer (2015) stated that teaching and learning resources were inclusive of teaching strategies, material resources, time dedicated for instructional procedures, understanding and expertise developed through pedagogy and instructional experiences. Accordingly, Vandenabeele (2014) affirmed that for effective teaching and learning to take place, schools must have enough of resources comprising basically of books, charts, enough furniture, physical facilities and buildings, time for instructional purposes and clear management of human resources.

Lyons (2012) and Béteille (2012) observed that un-conducive working conditions such as poor amenities, lack of library facilities and dilapidated school buildings negatively affected female teachers in Pakistan and their productivity was minimal. The study emphasized that teaching and learning resources were not always available in schools and their inadequacies had been of great concern to educators. Inadequacy of teaching and learning resources in institutions results to straining situations of employees and the effort to expend discretionary work effort is affected and this problem is physical in the learning institutions

especially in Isiolo County where availability of resources was inadequate (Isiolo Education Office, 2020).

Lyons (2012) and McCuiston and DeLucenay (2010)found out that instructional procedures involved integrations of teaching/learning resources, teaching strategies and the bond among leaders, teachers and the school-based environmental factors. Availability of teaching/learning resources, enhanced school effectiveness, brought about good academic outcomes and enhanced teachers' level of discretionary work effort. Studies on influences of teaching and learning resources on teachers' level of discretion have shown that there is a relationship between teaching/learning resources and teachers' level of discretionary work effort, as well as, students' achievements. The study observed that employee's work effort cannot be complete without recognizing the importance of teaching and learning resources within the school environment, their actual development and reflective use. According to Ugwu et al. (2014) work empowerment entails recognizing employees' rights and making provisions of proper teaching and learning resources. The study affirmed that organizational managers who actively engaged in identifying their employees' needs greatly enriched their discretionary work effort and organizations performed better. The author argued that engaging employees in actual preparation and developmental process of teaching and learning materials made them motivated and more engaged.

Car and Ipek (2019) observed that unfair distribution of school resources affected school outcome and teachers' ability to expend discretionary work effort. Whereas some schools are well equipped with resources in terms of infrastructure, personnel and instructional materials, others have inadequate classrooms, unfriendly playing grounds, inadequate

sanitation facilities and poor access to social amenities that highly affect teachers' ability to expend their extra work effort (Matimbe, 2014). The study also noted that the level of degradation of teaching and learning resources was a typical indicator of quality of teaching and learning materials available in the learning institution and the extent to which they influence teachers' ability to expend their discretionary work effort. Inadequate or absence of these resources acted as stressors, affecting teachers' ability to expend more work effort and school outcomes as well. Adalikwu & Iorkpilgh (2013) observed that instructional materials such as textbooks, charts, maps and laboratory equipment including reagents, and projectors had an impact on effective teaching and learning. Najumba (2013) observed that ineffective budget allocation and delay in reimbursement of government capitation to schools was an impediment in acquiring teaching and learning resources. Hence, it was difficult for teachers to share and effectively utilize the little available resources in some schools and this influenced their ability to expend extra work effort.

2.3.1 Physical resources

According to Najumba (2013),Pakistan, observed that availability of teaching and learning resources was dependent upon disbursement of funds by the ministry. Analysis of the study show that luck or inadequacy of these resources impended proper teaching and learning due to their quantities, especially in schools located in ASAL areas. Adalikwu and Iorkpilgh, (2013)focusing on factors influencing teachers work effort observed that teachers performed well when provided with adequate TLR. The study noted that availability of teaching and learning resources, including current technology, enhanced teachers' motivation to engage in more work effort. School environments must ensure provision of locally available resources that are not offensive or controversial in nature, but provides

challenging and engaging learning programmes for both teachers and students. Likoko et al. (2013) all stated that inadequacy of instructional materials, including syllabuses, charts, projectors and textbooks had an influence on teachers' discretionary work effort and this affected their ability to make decisions. Reduced funding and delay in reimbursements of FDSE funds was found to affect the management ability to provide required resources to keep teachers motivated and this affected the level of their ability to expend discretionary work effort.

Farndale and Murrer (2015) exploring the influence of physical facilities in public secondary school in USA, asserted that physical facilities in a learning environment include classrooms, laboratories, and libraries, dispensaries with well-equipped isolation rooms, sanitation centres and furniture. The author affirmed the importance of physical facilities in the process of teaching/learning and scarcity of these facilities has led to many schools opting to share infrastructures with their neighbouring secondary schools. Lack of physical facilities in learning institutions is a reality in Isiolo County where secondary schools adjacent to primary schools (Education office, 2020) are forced to share facilities such as sanitation areas, dispensaries and playgrounds. Accordingly, information received from Education Office, affirmed that despite the inadequacy in resources distribution in most secondary schools, managers must try to incorporate processes that enhance employees work engagement and discretionary work effort.

Adeogun (2007) and Akomolafe (2016) opined that school outcomes and teachers level of engagement depend upon the conditions of the school physical facilities. The findings confirmed that a positive relationship existed between employees' work effort, physical

facilities and organizational outcome. The findings indicated that most schools in the country had inadequate resources, especially in Isiolo County, which falls under arid and semi-arid lands. Adequacy of these facilities especially classrooms, libraries and laboratories according to Likoko, et al., (2013), are of great concern and lack of or inadequacy of these resources affect teachers ability to deliver the expected content at school. Good results are indication of teacher engagement and a factor in identifying the level of their discretionary work effort.

According to Lyons (2012), observed that schools with adequate physical facilities performed better than schools that were less equipped. This was in agreement with (Farndale & Murrer 2015) who argued that private school teachers possess more discretionary work effort due to adequacy of teaching and learning resources and were more motivated than those teachers in public secondary schools with minimal teaching and learning resources. This argument described the diminishing situation of physical resources in public secondary schools and the influence they have on teachers discretionary work effort. The findings stated that due to inadequacy of teaching and learning materials teachers were demotivated to give extra work effort, go an extra mile and the final outcome were poor. School managers must identify procedures and acquire most available opportunities to leverage employees' work effort as essential strategies for organization effectiveness. School environment must also create a culture of high expectations and increased productivity and efficacy, despite minimal availability of teaching and learning resources.

Akomolafe (2016) emphasized on the importance of adequate resources in achieving effectiveness in curriculum delivery in the school system in Nigeria. The findings show that lack of buildings, furniture, playgrounds and extracurricular activities experienced in secondary schools, negatively affect quality of learning and teachers' discretionary work effort. Mwiria (2004) observed that inadequate physical facilities affected classroom control, discipline as well as teaching /learning atmosphere. He opined that adequacy of teaching and learning materials influenced teacher's discretions and institutional performance. It was also observed that all secondary schools required enough of teaching and learning facilities to influence teachers to voluntarily expend more work effort.

Morris (2017) focusing on influence of physical facilities and teachers' level of work effort, found out that school physical facilities should be both appropriate and attractive to motivate and instill positive attitude to teachers to influence their ability to expend more work effort. The author affirmed that organizations with appropriate physical facilities such as enough classrooms, libraries, laboratories and enough furniture stood better chances of performing better in examinations than poorly equipped schools. Poor academic outcome in most schools is associated with insufficient teaching and learning materials and equipment, these impair teacher's ability to expend more work effort.

Introduction of free and subsidized basic education by the NARC government in 2003, (Free and compulsory primary school and subsidizing of Free Day Secondary Education (FDSE), stresses the need for educational resources. This was evidenced by the high enrolment rate witnessed in both boarding and day secondary schools. Quality and effectiveness of these resources has been reduced by the tear and wear processes, leaving

schools wanting for enough and better resources to meet the high enrolment rates (FDSE, 2014).Public secondary schools straggle for availability of appropriate, physical facilities and teaching/learning materials (Mwiria, 2004). Poor construction standards and poor maintenance leave the sector with few classrooms and furniture to cater for the growing number of secondary school admissions. Barrick et al., (2014) emphasized that the introduction of FDSE and hundred percent transitions of learners from primary to secondary schools strained the available facilities and left schools straggling to meet the expected educational standards.

Ministry of Education Science and Technology (MoEST, 2010) on a survey of availability of physical facilities in secondary schools in Kenya confirmed the pathetic condition of teaching and learning resources in most of the schools. The findings observed the dire situations of inadequacy of physical facilities experienced in day and boarding secondary schools especially in Arid and Semi -Arid regions where Isiolo County is situated. The study confirmed the crucial role played by physical facilities in teaching/learning process. The findings encouraged teachers to expend more work effort at their place of work and emphasized on the importance of institutions to ensure that resources provided were of quality and met the required standards. Provision of adequate TLR, determines the efficiency and effectiveness of the education system. For effective teaching/learning, the writer argued that availability of textbooks; digital devices and adoption of modern teaching pedagogies were key resource materials for effective teaching. However, their inadequacy made teachers handle subjects in an abstract manner, negatively affecting their ability to apply discretionary work effort.

The MoEST (2010) survey observed that in most public secondary schools, classrooms were usually jam-packed with students. Teachers found it difficult to teach and manage students' adequately. As a result, there were skipped lessons, poor classroom management and ineffective teaching and learning processes. All these, factors contributed to poor academic performance and teachers' motivation to expend extra work effort was affected. The findings also show that teachers' ability to expend more work effort diminished when the school failed to provide adequate resources. UNESCO (2012) identified the pathetic situations in most Kenyan secondary schools and stated that poor school outcomes were evidenced by inadequacy of teaching and learning resources. MoEST (2010) raised concern on the quality of physical facilities in both day and boarding secondary schools. The conclusions were that for schools to perform, stakeholders must find ways of supplementing government funding to secure enough facilities for their institutions. However, this becomes a concern in areas where availability of these resources is wanting due to poverty and drought.

2.3.2 Human resources

Human resources can be defined as individual expertise, the command and professionalism displayed by an individual employee. Human resources function involves hiring, firing, mentoring, guiding and monitoring employees work processes. This places human resources personnel as an assets and a critical organization capital. Human resources are organizational factors that are entrusted to monitor, motivate and influence employees to do better. Bartanen and Grissom (2019) observed that human resource is a key factor in any working environment. In an organizational context, human resources refer to the number of people employed, their qualifications and ability to perform required tasks. In learning

institutions, it means getting the right number of teachers with the required credentials and qualification to work beyond their call of duty USA. The findings affirmed that a learning institution that has enough workforces is less stressed and teachers are able to perform their primary responsibilities and desire for extra work effort. According to Kortmann et al. (2014), China, human resources in a school setup could also refer to those people entrusted with responsibilities of managing the affairs of the school including teachers welfare, support staff and students well-being for effectiveness and organizational efficiency.

Human resource management has come from being a personnel management functions to a strategic and decision making process that could build or break the success of any organization. These employees were referred to as human capital and their main responsibilities were efficient and effective utilization of the employees work effort and to minimize risk and practices that were not organization beneficial as well as maximizing returns to investment. The major function of a human resources officer is to help workers to effectively contribute to the achievement of institutional objectives by influencing them to expend extra work effort, being more productive and by depleting activities that were not organizational objective oriented at the work place. Adegbuyi et al. (2015) opined that human resources were tasked with preparing employees to be updated with current and international strategies that were required to make them effective and efficiency at their work place. Organizational prosperity, good outcome and effectiveness is dependent on ability of the human resource officer to unleashing work effort from employees and keeping them motivated to enhanced their wish to go an extra mile by expending more work effort and concentration when performing a task.

Human resources are catalysts that make a firm competitive and their absences or disengagement creates a vacuum through which big and well performing organizations can scramble drown to obscurity. In order to sustain employees' engagement, the human resource department must expend extra effort to unleash work effort of the employees (Kortmann et al., 2014). According to the author, employees are motivated by different incentives and managers must understand that which influences their employees' motivation today may not purposefully influence their discretionary work effort in the future, therefore, there is need to put in place strategies that are flexible in meeting teachers' expectations.

Organizations have witnessed phases of development from satisfied and committed employees who are not prone to worn out but have immersed interest in the objectives and success of the organizations, and often serve as the driving force behind organizational success. However, employees' commitment has been witnessed in diverse characteristics with some expending more work effort and others doing just what is necessary (Kuncoro & Dardiri, 2017). Despite that, most success is infused to successful administration, the impetus behind organization's success comes from the organizations human resource personnel's' ability to manage employees and keep their discretionary work effort motivated.

According to Tentama (2016) and Ellinger and Ellinger (2014) findings on employees' engagement found out that organizations with friendly human resource workforce kept employees' management at heart and they were source of motivation to expend more work effort. Organizations where employees were more engaged had greater outcomes compared

to low engaged employees. This was in agreement with Tett and Meyer (1993) and Kalianan and Samuel (2015) on examining employee's engagement and organizational productivity in Malysia and China. Both studies show that human resource involvement in unleashing employees voluntary work effort was evident for an organization to perform.

On another study, Harvard Business Review (HBR, 2014) and Adegbuyi et al. (2015) in Kenya,both observed that employees' discretionary work effort was viewed as the epitome of attraction among organizational managers. Based on the results outcome, human resource was found to be critical to the success of every organization, and that in organization where human resources were motivated; employees were more engaged and expended their discretionary work effort compared to organizations with less motivated human resource personnel. The study also discovered that engaged human expertise reduced risk of employees' burnout, hiring and retention expenses, increased organizational growth and improved organizational productivity. Given the importance for such positive outcomes, perhaps, leaders across the world must pump effort to change their leadership styles to re-evaluate organizational movements to accommodate human resource as organizational resources for best outcome.

While Musgrove et al. (2014)while conducting a survey on employee work effect in Kenya, define the importance of human resource as employees' level of engagement, most research have been conducted within the boundaries of the developed countries. The importance of human resource influencing employees to unleash discretion is still on its developmental phase and not much study has been carried out on the subject, especially in developing countries, including Kenya. By the time of this study, not much was known on the subject

of the influence of human resource as a school-based environmental factor and its influence on employees' ability to expend more work effort for best school outcomes. The researcher is optimistic that the findings of this study will be resourceful to both academic and organizational settings for better outcome.

2.3.3 Time

Time and human capital are considered critical factors in organizational settings. Time is an infinite resource that has both positive and negative impact on employer's and employee's outcomes if not properly managed. Lakein (1973) affirmed that time management is the ability to use time effectively and productively to meet organizational objectives and has influence on organizational planning and how it achieves its goals. According to Sue and Rupured (2017), managers should ensure that workers are well trained on time management as part of their responsibilities for the effectiveness of the organization.

A comparative study Yanik et al. (2016) on different organizational management structures, affirmed that investment of time was significantly and positively related to teachers' discretionary work effort. The study asserted that teachers' knowledge, skills, creativity and talents remain idle if their time is mismanaged. Relationship between teacher motivation and discretionary work effort depend on supportive time balance. Time is a valuable and limited resource, and teachers respect leaders who value their time. Teachers regard time as personal property and an effective administrator would commit teacher's time with specific reasons. Competent teachers require time to accomplish all that needs to be accomplished at the work place. Ownership of time propagates teachers' pride and creativity in their work and directly generates a higher degree of discretionary work effort. Most leaders are mindful of time

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pressure faced by teachers and limit factors that deplete this vital resource to maximize time to allow teachers plan and meet students' needs (Yanik et al., 2016).

Time management reduces stress, leads to organization's efficiency and effectiveness (Gerrard et al., 2017). Literature states that physical facilities including time and human resource have great influence on employee's work motivation and their ability to expend more work effort, however, motivation was identified as a drive that is influenced by rewards and employees were motivated by that drive to expend more time doing a specific activity. The effect of these factors has been felt in previous studies conducted on physical resources, especially time, as a learning resource (Yanik et al., 2016) and how it influences teacher's ability to expend their discretionary work effort. According to the researcher's understanding, no particular study has been conducted on how time as a teaching and learning resource influences teachers' ability to expend discretionary work effort, especially in Isiolo County. Teachers value their time and spend it attending to learners and implementing the curriculum. Consequently, investigating the effect of time on teachers' effectiveness enabled the researcher to answer questions on whether time as a teaching and learning resource and teachers discretionary work effort are correlated.

2.4 Principal's Leadership Styles and Teachers' Discretionary Work Effort

Leadership is an act of working with and guiding followers to adapt strategies that focus on improving and promoting institutions' wellbeing. However, those in educational leadership roles are tasked go above and beyond management and administrative responsibilities in order to meet the expected outcomes. In this study, principals' leadership was found to be a significant antecedent of institutional efficiency and effectiveness (Lussier & Achua, 2015).

It comprises of indicators of effective leadership behaviour and characteristics that are perceived to support institutional growth and influences on employees' discretionary work effort midst of the turbulence economic situations. Effective leadership behaviour is reflected in principal's self-awareness, communication of information, transparency, and respectful treatment of employees and setting of organization's appropriate ethical behaviour (Anitha, 2014). Trust and support in the leader, creates a conducive working environment and these are components of psychological safety which enable employee to be more engaged. Leadership, according to literature reviewed consists of inspirational and motivational traits by which leaders provide meaning and influences employees' to give more work effort. A leadership characteristic also provides intellectual stimulation to support employees' flexibilities and creativity in a blame free context (Mostafa et al., (2017). As a result, employees develop trust in their leaders and accordingly reciprocate by expending extra work effort to fulfill their obligations to the organisation.

The influence of leadership on organizational change has grown significantly in current years. Leadership is a major factor in work environments toward building a successful transformation capacity for organizational change (Judge et al., 2015). The available literature indicates that institutions are changing rapidly and becoming more volatile and impulsive as they try to cope with the global economic change. However, most of the time the institutions fail due to in-effective management and leadership styles that lack change oriented practices (Ghasabeh et al., 2017; Judge, 2017).Effective principalship characteristics require leaders to adopt a framework that defines the approach on how decisions are made, what goals to be prioritized and how and when to interact with other

stakeholders for effectiveness of the organization. Leadership has immense impact on how employees expend their discretion and perform to achieve positive organizational outcomes.

In the USA a survey by the Department of Labor (2015), affirmed that employee's withholding work effort was evident in organizations registering declining outcomes. Leaders and organizational managers tirelessly search for ways to keep their employees engaged and how to induce their discretionary work effort for best results. However, literature has stated that little is being done to identify the potentials from every employee. The study found out that employees who were more engaged, spent more time at their work and had better outcome (Ahmetoglu et al., 2015). According to this study the institutions experienced high retention rate and low turnover among employees. The study concluded that employees recognized pay as the benefit of working but considered motivating leadership style and enabling work environment that is stable and assuring as a motivational factor to induce their discretionary work effort. Avey et al. (2012) also opined that when leaders recognize their followers, their followers become competent and more dynamic at their work. Herzberg (2003) and Morris (2014) drew attention to the importance of leadership characteristics and the motivational roles they play on employees work effort. They contended that leadership is the ability to adapt the settings so that everyone felt empowered to contribute creatively to solving everyday problem and to contribute to organizational success.

Leadership is a science which defines a leader and what he/she is capable of doing. Accordingly, Judge et al. (2017) on a study on leadership effectiveness and employee engagement, Georgia Institute of Technology and Ohio State University, identified that a

leader is a motivator, a director, a vision setter and a servant to the people one is leading. Effective leadership provides a workable vision; an explicit philosophy that directs employees' effort to the attainment of organizational goals. Leadership effectiveness and its role in shaping the work environment and its association with immense organizational level of effectiveness has been credited as helping the institutions to cope with emerging global opportunities. Leadership has widely been acknowledged by both the economists and behaviourists' literature as a change factor in all organizations.

Psychologists in the OB literature have also argued that a positive leader relationship motivates an employee to expend more work effort (Morris, 2014) observe that creating equality between moral perspectives and inter-personal relationships with employees has proved to create a healthy work environment. Leaders who are authentic influence employees' level of motivation and enhance their discretion. The focus of this study was based on transformational leadership style, transactional leadership style, laissz-ez-faire and autocratic leadership styles. These leadership styles, the researcher believed were commonly used and applied in learning institutions and have proved to influence employees' level of engagement. Herzberg (2003) and Morris (2014) also drew attention to the importance of leadership characteristics and the motivational roles they play on employees work effort. They contended that leadership is the ability to adapt the settings so that everyone felt empowered to contribute creatively to solving everyday problem and to contribute to organizational success. A focus on some of these leadership styles identified, enabled the researcher to identify the influence of leadership style on teachers' ability to expend discretionary work effort at the work place.

2.4.1Transformational leadership style

In Hong Kong, Niphadkar (2017) argued that transformational leadership style is a leadership characteristic where leaders work with followers to achieve greater outcome beyond their immediate organizational objectives by creating a vision to guide the change through influences, inspiration, and executing the change together with a team of committed members (Niphadkar, 2017). Transformational leadership elevates follower's level of maturity and motivation distributing power amongst all stakeholders to make leadership effective. Transformational leadership involves getting into a consensus with the followers with intent to realization of a certain organizational goal (Northouse, 2016).

Transformational leadership is defined as a change leadership style that generates awareness and advocates for change through motivating the followers (Choudhary et al., 2012). This leadership is well documented for its persuasion- based characteristics to influence both teachers and principals to meet organizational objectives (Lussier & Achua, 2015). Transformational leadership was first conceptualized by Bass (1997) and cited by Mostafa, et al. (2017) as a leadership style that influences employees' level of motivation by persuading them to expend their work effort towards organizational objectives. Transformational leaders influence the interests of their employees by increasing level of their needs that result in satisfaction and self-fulfillment (Li et al., 2016). Satisfaction of a lower need according to hierarchy of needs theory is a source of desire for satisfying a higher need which is expending more work effort for best organizational outcome.

Transformational leadership style is adopted by leaders in many institutions for its ability to persuade followers to do more than what is minimally expected. This leadership style has

four components that define its characteristic to influence followers   (Sadeghi & Pihie, 2012). The first is idealized component which is the degree to which leaders instill sense of purpose, values, beliefs and collective sense of mission to their employees. The second is intellectual component, the degree to which leaders accept differing opinions, and inspire a thinkable environment where employees appreciate their differences and work on their weaknesses. Thirdly, the inspirational component which involves leader's behaviour that transforms followers' attitudes, beliefs and values and the ability to motivate and inspire employees to have trust in the leader? Transformational leadership is grounded on understanding the needs of individual members. The leadership seeks to influence workers by building from bottom-up rather than from the top. Finally, there is the individualized component which enables the leader to appreciate individual's contribution, their strengths and their weaknesses (Imran et al., 2011).

Transformational leaders are able to transform people and organizations to change by communicating significant standards to encourage and persuade employees to respond to leader's attention (Yasi & Mohamad, 2016). Transformational leadership is a factor of concern in this study for its ability to keep employees engaged. Literature on transformational leadership style indicates that transformational leadership is a persuasive leadership style and much time is wasted persuading employees to be compliant. Accordingly, the level of employees' enthusiasm goes down when leader's ability to persuade is challenged (Yasir & Mohamad, 2016). However, one of the weaknesses of transformational leadership style is that employees require constant supervision and communication for them to work above their minimal level. Hence, the focus of this study was to identify a leadership style that enhanced employees work effort to work to their

optimum level with less supervision (Pennsylvania State University, 2020). Currently, education institutions have minimal time for persuading employees to meet institutional basic needs. The need to voluntarily expend extra effort is aggravated by the introduction of Competency Based Curriculum (CBC) where teachers voluntary work effort is of concern. This leadership style is relevant to this study because its model identifies the relationship between employee's effort expended under persuasion and discretionary work effort. Consequently, the leadership style would not work on isolation and due to its need for persuasive characteristics; a blend of another leadership style is evident.

2.4.2 Transactional leadership style

Transactional leadership is a result-based method of either appreciating or criticizing someone's work to drive their motivation to expected results. Its major objective is to maintain the status quo of the institution by subjecting employees work effort to evaluations based on the results delivered where employees are either given a reward or a reprimand. Transactional leadership works better in critical situations where results are of utmost importance. The leadership focuses on improving employees' performance and produces best results in a structured environment.

Transactional leadership style, also referred to as managerial leadership style focuses on supervision and group performance by trying to maintain the status quo of the organization. Transactional leadership style is found to be more effective in influencing employees' motivation and improving school outcomes by clarifying individual roles and responsibilities (Li et al., 2016). This leadership style was first conceptualized by sociologist Max Weber and further discussed by Bernard Bass in early 1980s. By

conforming to existing organizational structures, transactional leaders measure success according to the organizational system of rewards and penalties. Transactional leaders use commands and threats to control and maintain certain work behaviours from their subordinates. Unlike transformational leaders who are straight forward setting new institutional objectives, transactional leaders work on sets of short term objectives and are interested in maintaining the status quo by directing their members on what to do (Ghasabeh et al., 2017). While transformational leadership style focuses on transforming employees over a long period of time, on the contrary, transactional leadership focuses on driving results over a short period of time (Northouse, 2016).

Transactional leadership style is believed to perform better in extremely demanding conditions where the focus is to complete certain organizational objectives within the required time. Employees under work crisis situations lack time, encouragement and ability to expend extra work effort at their work place. They focus on improving their output to acquire better feedback and reinforcement as a source of motivation (Muga, 2019). This leadership style is considered insufficient in most situations and usually prevents employers and employees from exploiting their full potential due to its rigidity and job restrictions. Transactional leaders influence their followers by facilitating their hierarchical needs in order to dominate them (Maslow, 2009). Despite that, transformational and transactional leadership styles hold the higher opportunities for a productive organization.

Transformational leadership style gets its outcomes by persuading its followers to meet its expectations by applying a continuous process of unleashing discretionary work effort of employees while transactional leadership style emphasizes on employees to work hard to meet the status quo of the organization (Khan et al, 2014; Yasir & Mohamad, 2016). In this

study therefore, the focus was to identify how leadership styles inspire employees to expend their maximum level of work effort, regardless of principal's recognition or expectation of any rewards from the organization. Mainly, one of the major challenges of transactional leadership style is that employees work hard to get positive reinforcement diminishing their effort to expend their discretionary work effort when these results are realized. This tires employee out and inhibit individual's ability to expend any extra work effort due to rigidity and strict supervision (Sadeghi & Pihie, 2012). Different organizations demonstrate different leadership styles and how they influence work effort of their employees at work place. It is notably evident that both transformational and transactional leadership significantly show evidence that they influence organizational outcomes but literature has shown that each has a limitation to sustain discretionary work effort direction of employees. Hence, results of different leadership style's influence on employees work effort were necessary to identify their effect on their ability to expend discretion at work place.

2.4.3 Autocratic leadership style

Autocratic leadership style, best known as dictatorship or authoritative leadership style is based on principal's decisions based on self ideas, judgments and hardly accept inputs from other stakeholders (Sougui et al.,2016). Autocratic leadership style is absolutely authoritative with those relying on the approach often seen as bossy and dictators-like; however, this level of control has benefits and is useful in certain situations affirm that application of this leadership style results in irreconcilable conflicts among workers and a source of hostility in the school administration.

Autocratic leadership style is characterized by dictations and controlling of all tasks and group decisions. Yasir and Mohamad(2016) stated that an autocratic leader displays a commanding and insecure character when faced with a challenging decision making situation. In this kind of leadership, the leader assumes that ordinary members are limited in ability and cannot be trusted to manage without strict guidance and control. These assumptions alienate employees work effort and diminish their feeling of being motivated, consequently affecting their ability to expend discretionary work effort (Yasir & Mohamad,2016)

Accordingly, Yasir and Mohamad (2016) stated that autocratic leadership is rigid and some-what formal. The authoritarian leaders assign tasks, discourage interruptions and are displeased with those employees interfering with his/her authority. In this leadership style, employees are not allowed to make their own decisions unless the leader gives authority. This interferes with employees' discretion and ability to expend extra time and energy, because of fear of being intimidated and reprimanded. An authoritarian leader is reluctant to recognize and appreciate those disagreeing with his or her authority. An autocratic school principal was found to dominate the entire school decision-making process and this inhibits freedom to make choices and teachers' ability to go an extra mile. In this style of leadership, members have little alternatives except submission to dictation. The authoritarian leaders often make direct or indirect influence by withholding privileges when members fail to agree and arbitrarily put off contributions that displease him. More often the leader ignores any contributions made by those who seem to disagree by either not re-enforcing the contribution or not implementing the decision, good as it may be.

Autocratic leadership demoralizes employees and diminishes the power to be motivated. When employees feel frustrated, their work effort and their influence on organizational outcome is effected (Sadeghi & Pihie (2012). This type of leadership elicits much hostility and aggression, resulting in dissatisfaction with one situation and lack of contentment among employees. It encourages submissive or dependent behaviour. This situation denies teachers the ability to be explorative and innovative in taking risk in implementing school policies. However, autocratic leadership frustrates employees' effort to be more engaged and this affects their ability to demonstrate their discretionary work effort. Such leaders depend on employees' willingness to perform as per their job description. Autocratic leaders get frustrated when employees get adapted to the stressing environment and lose confidence in them. However, autocratic leadership is important when leaders need to make crucial decisions and especially when urgent resolutions need to be affected. According to(Avci, 2015a), a leader is a model and employees build trust in leaders who can be relied on.Sougui et al. 2016) also argued that leadership style adopted should match the appropriate situation. This was also cited by Yasir and Mohamad (2016) in their continuum model that leadership style is dependent on the leader, followers and situations.

2.4.4: Leis-ez-faire leadership style

Lais-ez-faire leadership style, best known as delegative leadership model was a factor of concern in this study. The expectation of this leadership style on the influence of teachers discretionary work effort was that leadership style where leaders allowed employees to make individual decisions and solve their own problems could probably influence them to expend more work effort for best outcomes. However, on a close analysis, literature has

shown that lais-sez faire leadership characteristics leads to the lowest productivity among group members, due to its flexibility and leaders dependence on followers to make and implement decisions for the institution (Sadeghi & Pihie, 2012). However, this leadership style can best be applied in situations where group members are committed to the task. In developing, adapting and applying leadership, Pennsylvania State University (2020) affirmed the importance of considering both the advantages and disadvantages of every leadership style, depending on the work situation, followers' work characteristics and the organizational situations one is working in.

In comparing these leadership styles, Morris (2014) show that transactional leadership is an appropriate approach for maximizing operational efficiency, but was limited in areas of innovation, creation of long-term strategy and employees' development. On the other hand transformational leadership was identified as an appropriate leadership for creating strategy and fostering organizational change. It was also identified as best leadership for transforming organizations and motivating employees to go extra miles due to its focus on employees' welfare. However, transformational leadership is basically motivational oriented and keeps employees engaged by promises of rewards, as these leaders are less concerned about daily workflow and processes with less motivation which is the focus of this study. Literature shows that transformational leadership style sustains employees' motivation and passion for a long period of time and produces best outcomes. A close observation on autocratic leadership style shows that the style is an individualized leadership that luck consultative;its authoritative dominated and demotivate employees from expending their work effort through threats and reprimanding. Laissez faire leadership style similarly was found to be the least effective and its characteristics detach the leader

from the employees. The detachment implies that every employee is at liberty of making self-discretion on what should be done without necessarily consulting the leadership; hence the consequences therefore are poor organizational outcomes. The literature reviewed on the four leadership styles identified that among the leadership styles stated none had the sole ability to keep employees motivated to expend their discretionary work effort. The study concluded that a leadership style that can allow employees to make their own discretion could be appropriate for organizational effectiveness and best outcomes.

In America, a study on the influence of work environment on employee motivation observed that employees need a conducive work environment to exercise their freedom to expend discretionary work effort. Lack of stress, conducive work environment motivated them to be innovative and productive. However, a work environment that lacks rules and good leadership, most employees stray away when leadership style applied is softened. Such situations require a leadership style that is firm and authoritative for employees to keep working (Avci, 2015a). Literature on employee's work effort, indicate that leader's behaviour that displays concern for employee work engagement, as well as, concern for people has great influence on employees' discretionary work effort. However, no single leadership style is effective by itself and many leaders adapt multiple leadership styles at their place of work depending on the situation on the ground. Considerably, every leadership style is defined by its character and perhaps, leader's characteristic is what makes the differences (Sebastian et al., 2016). To that end a leader should exercise the appropriate mix of leadership styles that fit the situation that influences employees to expend more work effort for best organization outcome.

Literature on the influence of leadership style on employee engagement states that leadership style applied influences employees' level of motivation and school outcomes. Accordingly, it was found that leaders applied blended leadership characteristics depending on the situation on the ground (Avci, 2015a). It was also noted that by the time of this study, no similar study on the influence of leadership and teachers' discretionary work effort had been conducted among secondary school teachers in Isiolo County. This gap called for a study that this study wished to fill. Currently, most secondary schools in Isiolo County are experiencing inadequacy of inceptive measures and resources to reward their teachers to keep them motivated, hence to tap their discretion; it therefore, becomes difficult to keep them motivated to expend their extra work effort. Leaders and managers are tirelessly looking for ways, including identifying leadership styles that can influence and keep employees motivated to freely expend their discretionary work effort for best school outcomes. A leader holds the mantle and has great influence on how employees work and how organization performs. At this point however, most studies focus on the influence of leadership style and employee motivation. Comparatively there is little information available is mentioned on how leadership influences discretionary work effort of employees in the academic sector, which leaves a gap for further research(Sebastian et al., 2016)).

2.5 Teacher's Work Characteristics and Discretionary Work Effort

Work characteristic is the ability or qualification displayed by a teacher while implementing school policies and work requirements. These include, the ability to teach effectively, mastery of the subject taught, feelings and attitude one has towards work and work environment. Accordingly, Lussier et al. (2015) and Morris (2014) employees work characteristics is influenced by conducive and attractive school environment which enhances employees' work behaviour and instilling the spirit of hard work and determination. Teachers' work characteristics can be explained under different headings, but this study limited itself to teachers' attitude towards work, work characteristics; relationship with colleagues and the organization one is working in and for.Like other workers, teachers make decisions on whether to remain on their current job or not. Their argument on whether to quit or stay is based on the quality of working conditions, the relationship with leaders and interaction with co-workers that eventually influence their motivation to display the best character and expend discretionary work effort (Fuhrman et al., 2010). Teacher's work characteristics were found to be influenced by educational challenges brought about by the emergence of new technologies and global demands that require teachers' ability to perform. Teachers' work characteristics are dependent on the principal's leadership style. Institutional leaders have powers to unleash teachers' discretionary work effort, by allowing them opportunities to develop positive work characteristics that trigger their motivational level to expend more work effort(Morris & Douglas, 2014).

Most work environments denote failure for teachers to expend extra work effort, limiting their ability to go an extra mile at their work place. Work environment comprises of features that provoke stimuli to which employees respond positively or negatively. These stimuli serve as motivators "perks" or demotivator "irks" which influences employees to drive satisfaction or dissatisfaction at their work. Teachers work characteristics were also influenced by quality of the leadership style, leader's characteristics, and the extent to which teachers are given opportunities to make their discretions, improve students' learning opportunities and develop themselves professionally (Hirsch &Emerick, 2006).

Employee work engagement has been studied in the context of different countries and literature documented. A study to examine the influence of employees' engagement on organizational productivity in America, Kellehes (2011) indicated that approximately half of the employees in several organizations were disengaged. The analysis stated that there was impaired productivity and economic loss in the country economy. Inadequacies of resources constraints including lack of adequate equipment, physical facilities and information technologies influence teachers work characteristics (Fuhrman et al., 2010). Literature here states that job characteristics influences work effort either directly or indirectly. However, these studies have been done in developed countries and leave a gap for further studies in developing countries, especially Kenya, and Isiolo County, in particular.

A study to identify, the influence of teachers' work characteristics on employee motivation in United Kingdom discovered, that employee work characteristics influenced work effort and enhance discretionary work effort which is factored in organization outcomes. Parker et

al. (2001) argued that work characteristics provide opportunities for acquisition of new skills and techniques required for solving problems and also increases employees' motivation to employ discretionary work effort. A similar study was conducted (Isfahami et al., 2013) to examine the influence of work design on employees' motivation and how it enhanced their discretionary work effort. The findings show that employees were demotivated when their leaders denied them opportunities to be innovative. The study recommended that leadership should develop a model to integrate employee work characteristics and work design to enhance their work effort. These findings are supported by the hierarchy of needs theory which advocates for a workable environment that freely allows employees to expend their discretionary work effort while striving for better outcome. Kuncoro and Dardiri (2017) concurred with the findings that teachers' level of performance was influenced by working conditions in many of the public secondary schools.In Kenya it was also found that employee work effort correlated with work effort expended and institutions that had initiated employee discretionary work effort, employees were motivated and had better outcome.

In Saudi Arabia, a study to explore the significance between employee work effort and work engagement (Lai et al., 2020)on a study population of 408 participants in a private organization observed that a positive correlation between employee work effort and work engagement existed. The findings also show that employees were demotivated when environment conditions were not friendly and conducive. The study suggested that more research on employee work characteristics and work environment needed to be conducted to identify factors that motivated employee to expend more discretionary work effort at their work place.

Employee work engagement and work effort is a critical factor in organization effectiveness. Findings from a study conducted in three different countries, Japan (Shimanzu, 2009), Greece (Schauli et al., 2002) and India (Anitha, 2014) confirmed the importance of teachers' engagement in increasing employee work effort and organizational outcome. Research confirms that global findings indicate the negative effect of employee disengagement at work place and on the organization as well.

In Zambia et al. (2003) and Mavhundutse (2014)on a study to assess the impact of work environment on employee satisfaction further asserted that work environment should provide stimulus situations that enable an employee to experience psychological growth and emotional motivation to focus on specific work objectives. The importance of work contents as determinants of employee DWE was also supported by hierarchy of needs theory of work motivation, (Morris, 2014) and job content model built on Herzberg's work motivation theory. These theories affirm that cultivating positive work character influences employees work effort and satisfies the desired need at the work place. Accordingly, appealing work environment motivates employees to strive for higher order of needs such as job satisfaction derived from individual discretionary work effort (Maslow, 1954, 2009).

Teachers work character is depicted in good performance of an organization that clearly dictates the work effort of individuals. In Africa, a study to examine the influence of employee engagement on job performance in Egypt (Maha Ahmed & Zaki Dajani, 2015)noted that schools that in schools where employees were motivated and allowed freedom to be proactive and practice new teaching strategies performed better compared to schools that had rigid leadership that hindered employees work engagement. The findings

asserted that managers had applied different strategies to keep employees competitive and motivated. The study recommended that manager should identify the best leadership to apply to keep employee focused and motivated.

The effect of work characteristics on employees' motivation and their ability to expend DWE generally confirms employees' work characteristics correlates to certain aspect of work engagement (Mavhundutse, 2014). Findings from a similar study in Zambia asserted that school environmental factors that inhibit stressing characteristics, negatively influences employees' characteristics and the level of discretionary work effort expended. Literature on the influence of job characteristics and teacher's ability to expend discretionary work effort, cited pressure on workload demand, which is to be accomplished within the time limit.Pressure on job characteristics on work engagement was also noted by Adams Bacharach & Sorensen (2003) the all agreed that discretionary work effort was influenced by principal's characteristics, and co-workers support that affect teachers' ability to work effectively.

In Kenya, Odukah (2016) conducted a study on 278 participants to examine the influence of individual work effort on organization outcome observed that employee motivation was influenced by individual work effort. Findings show that work effort and ability to employ discretionary work effort was affected by organization outcome, work environmental conditions and on-job training. The study recommended that that work environment should be friendly and flexible. Okello (2017) also concurred with the findings and emphasized on friendly and conducive work environment that accommodate employees' different work characteristics. The intent of this chapter was to identify the relationship between teachers'

work characteristics and teachers' discretionary work effort in secondary schools in Isiolo County. The findings have shown that employee work engagement has been widely noticed as wanting problem in many organizations. This chapter further discusses the influence of teacher's attitude, co-worker support and mastery of subject content on employee's ability to expend discretionary work effort at work place.

2.5.1 Teacher attitude towards work

Attitude is defined as mental processes that directly or indirectly influence an individual behaviour. Attitude is a habitual way of reacting to situations, including expectations and emotions that represent teacher's overall inclination towards school or an individual. Attitude is psychological and constitutes cognitive, affective and behavioural perceptions (Child, 2004). Teacher's attitude towards work defines the parameters of teaching and learning and whether to expend discretionary work effort or not (Najumba, 2013).

Teachers' attitude towards work was also affected by the availability of physical facilities, leadership characteristics and co-worker support (Morris, 2017). Adequacies' of physical facilities affect the way teachers actualize the environment to foster enabling attitude towards work (Najumba, 2013). Teaching attitude between teachers and other workers develops a relationship of trust (Brown and Richard, 2008) and this makes the work environment feasible for all to work in. According to Silberman (1990), attitude motivates teachers to create challenging and nurturing environment for students to learn and it is a source of teachers' discretionary work effort.

Kahn et al. (1992) in Saks (2006) stated that discretionary work effort and attitudes are positively correlated. High level of work engagement is emotionally characterized with

positive attitude that equips individuals with time and incentives to bring themselves to work and be more engaged. Apart from teaching, attitude makes teachers to be skilled leaders focusing on decision making, teamwork, as well as, community building. Attitude motivates teachers to adopt leadership responsibilities and to allow their students to assume leadership characteristics, while adapting to the principal's leadership available. When students are motivated to do their best; teachers expend more work effort to accomplish that which is motivated (Fernandez, 2014). Teachers' work characteristics are demonstrated by their attitude towards work, colleagues one is working with and work environment. Teacher's attitude towards work is an important component of employee's work effort; this represents related characteristics that motivate related aspect of employees discretionary work effort. However, the literature reviewed dimly state how attitude influences 'work effort for maximum production. Attitude and employee's characteristics were a point of interest in this study such that the researcher wished to identify the relationship existing between the two especially in Isiolo County.

2.5.2 Co-worker's support

Organizations today are beginning to shift from individual based performance to organizational based team performances that require employees to work together to complete a task. This interaction positively or negatively influences organizational outcomes. Co-workers' support influences role perception, attitude towards work, individual effectiveness and is a source of information to support or discourage certain activities (Valadez-Torres et al., 2018). The relevancy of Maslow's hierarchy of needs theory at the work environments asserts that an organization is a social entity where

employees need to feel supported and require professional commitment from colleagues. This often reflects co-workers interaction in setting and implementing organization goals. Positive co-worker support means employees are emotionally motivated and the outcome is organizational productivity.

The impact co-workers may have on each other's job effectiveness is profound in both positive and negative ways. Behaviour of co-workers influence the way employees perceive and experience work environment. Anitha (2014) argued that co-workers support can influence the level of employee motivation to expend maximum work effort or can be a source of stress to exhibit discretionary work effort. The influence of co-workers behaviour operates in a similar way to leader's character on employee discretionary work effort and employees work characteristics. Findings by Bartanen (2019)on employee's commitment, co-worker support and organization outcome in USA, noted that employees responded differently between a supportive and non-supportive co-worker's behaviour.

Xu Chopik (2020) pointed out the importance of friendly work environment. The findings show that co-worker support brought about positive organizational outcome and individual development by directing their attitudes and work behaviour, accordingly. Khan et al. (2014)argued that team support depends on how other employees value their contributions and cared about their well work. Extra work effort is realized from employee's level of team commitment and supportiveness Co-workers behaviour is believed to support and influence role perceptions, work attitudes and individual effectiveness at the work place. Friendly work environment is always associated with employees levels of job satisfaction,

job involvement and commitment to organization where employees work together to achieve common objectives.

Work attitude is influenced by co-workers task assistance, provision of organization information, or emotional support that is related to their job description (Bateman, 2019). The support has been found to reduce counterproductive behaviours, such as, coming to work late, purposefully working slow and being verbally aggressive towards other employees. The emotional support provided by co-workers also influences employee's ability to employ discretionary work effort and these results to increases in organizational effectiveness.

Nasomboon (2014) on two different studies (economists and organizational behaviour) indicated that workers were found to display low levels of work engagement in team or work group situations. The Low level of employees' discretionary work effort and low level of work engagement conceptualized in both the economists and organizational behaviour literature as a phenomenon often experienced by managers at work place situation. According to equity theory of work motivation, incentives expended must reflect the extended of work effort exerted. Thus according to this theory, if an employee is perceived as expending less work effort and get similar reward, feelings of unfairness develop among other employees. This creates inequity and lowers employee's morale affecting employees' psychological and emotional concentration as well as the level of discretionary work effort expended (Baothman et al., 2018).

2.5.3 Subject mastery

Subject mastery is defined as having great understanding or knowledge about the subject to be taught. Globally, educational sector is experiencing challenges in delivering subject content to students. When teachers understand their subjects they become competent and have less problem implementing and revising instructions. Application of information technology in teaching and learning processes is one dimension of teacher's ability to integrate global teaching pedagogy and competitiveness (Siddiqui, 2004). Beneath these characters is teacher's individual characteristics including believes and understanding about the subjects content, how it is best taught. That influences teacher's motivation and level of discretionary work effort. Understanding of a subject matter requires an in-depth evaluation of the subjects from different perspectives. Adapting to new ideas and information to enrich classroom situation, application of emerging pedagogical strategies and showing students how concepts and facts relates throughout the course is an evidence of a well prepared teacher. Generally, teachers depend on a planned curriculum; prepared instructional materials and a given timetable on how instructions must be delivered. Teachers must apply their understanding of the subject matter to develop a plan that best suits students' understanding (Siddiqui, 2004). However, if teachers have a problem in conceptualizing their subject, it becomes difficult to deliver the content and this affects their motivational level, resulting to less engagement and difficult to expend their discretionary work effort.

According to Morris (2017) and Siddiqui (2004), teachers' work characteristics determine how an employee behaves towards work and relationship between co-workers, which is of great importance in influencing work effort of employees. Morris cited motivation as

influencing work characteristics at the work place. However, the study focused on identifying mastery of subject content influenced employee's attitude towards work can be influenced to induce employees to expend discretionary work effort for organizations best outcome.

2.6 School Culture and Teachers' Discretionary Work Effort

Culture is a collection of customs, ideas and behaviours associated with a particular group or an institution. School culture is an exigency of teacher's attitude towards work and teacher's work characteristics. It comprises of an atmosphere of mutual respect among all stakeholders where teaching and learning are valued while achievements and successes are celebrated. Every organization has a culture that is unique and distinctive and the two cannot be separated. Robbins and Judge (2020) noted that a culture that is created and re-created by people is considered an asset to the organization; it contains the history of the organization and sets of written and unwritten expectations that define everything about the school. School culture influences the way people feel, think, methods of communication and the way employees act towards the objectives of the institution (Chaaban & Du, 2017). Culture influences everything that goes on in schools, such as, dressing habit, communication, the rate of change and emphasis given towards work behaviours and moderates teacher-students relationship (Bersin, 2014; Bhengu & Mthembu, 2014).

Studies on school culture agree that school culture influences employees work effort and their ability to expend discretionary work effort. In America it was observed that organizational culture and had positive effect on employees' attitude and discretionary work effort. The study show that culture influences work effort and employees' ability to say or

leave the organization. Analysis called for a culture that influences employees' motivational level and additionally influences organizational behaviour. The findings show that organizational culture had positive effect on employee burnout, work attitude, work climate and discretionary work effort (Morris & Bloom, 2002). According to Morris & Bloom, schools where principals get more concerned with factors that motivated and induced employees' psychological and emotional satisfaction, adopting their skills and embracing their knowledge, employees reported high work satisfaction level (Hanson & Miller, 2002). Similarly, school culture was seen to be predictive factor among the many factors influencing the degree to which teachers were able to make discretion about their jobs (Treputtharat & Tayiam, 2014).

In another study it was observed that culture influenced employee's motivation level and organization outcomes in North America (Morris & Bloom, 2002). Similarly, school culture was seen to be a relatively strong and consistently predictive factor among the many factors influencing the degree to which teachers were happy with their jobs. A comparative study on the effectiveness of schools with strong organizational culture and one exhibiting weak organizational culture indicated that a weak school culture demotivated employee's ability to expend extra work effort, while schools with defined culture had direct influences on employees' ability to expend extra effort at place of work (Treputtharat &Tayiam, 2014). Employees' perception of a positive school culture influences their willingness to reciprocate through exerting more work effort. However, several studies that have been conducted on the influence of school culture among many other variables in the academic sector have indicated that school culture affects the functioning of the school and teachers ability to expend discretionary work effort.

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Car and Ipek (2019) assessed the influence of school culture and employee motivation and whether their engagement level could be identified with their school culture. The findings concluded that individual motivation correlated with the type of institution and the position held. The study also show that employee motivation was statistical significantly correlated and could be predicted from their institutional culture. The asserted stated that Culture in an educational context influences students and teachers relationship. It was also noted that organizational culture and an orderly school environment were correlated and this directly or indirectly affected teachers work effort and school outcomes. Discretionary work effort is a byproduct of emotional and psychological commitment of an individual willingness to be more engaged and go an extra work effort. Organizational cultures that provide a psychological and emotional safe workplace improved employees' engagement, create ownership and employees strive to expend more work effort to achieve best outcome.

School culture is embedded on the principal's leadership characteristics, its impact on teachers discretionary work effort and organization effectiveness is evidence of leadership characteristics practiced. Bhengu and Mthembu (2014) on a study to find out reasons why schools sharing similar environments differ in teachers' level of work engagement and school outcome, stated that most schools had dominant culture where principals employed different leadership characteristics, had adequate teaching and learning reassures and co-worker support was evidence. The study further noted that principals' leadership style maintains the culture of the school and directly or indirectly influences teachers' ability to expend more work effort at the work place (Bhengu & Mthembu, 2014).

A culture that influences employees' ability to expend discretionary work effort brings out good school outcomes, while a toxic culture contributes to poor influence of discretionary work effort resulting to poor organizational outcomes. Research finding found that schools where social and professional relationships were positively established, teachers were motivated and the result was high student achievement and more work engagement, which is a direct consequence of discretionary work effort. Literature has shown that school culture is a strong and a consistently motivating factor compared to many other factors that influence the degree to which teachers were motivated at their place of work. (Treputtharat & Tayiam, 2014). On examining the influence of school culture on teachers' satisfaction with 297 participants found out that a significant positive relationship existed between school culture and teachers satisfaction that influenced their ability to expend discretionary work effort.

School leaders have the responsibility to create a school culture that is rewarding and emphasizes the importance of hard work and commitment to specific school values. Leaders must provide a secure workplace that promotes employee engagement to expend considerable time doing similar activities (Dollard & Bakker, 2010) argues that workplace environments that provide employees with psychological satisfaction were feasible when managers provide secure work place where employees were able to fulfill their work requirements and be able to exert extra effort at the work place pinpointed that work engagement was a challenge and argued that leaders were struggling to find ways to unleash employees' discretionary work effort for better performance.

A school where the principal creates a culture that allows teachers time to plan for their work, take responsibility of their time, manipulates the available resources for the advantage of achieving organization's objectives, have teachers with high discretionary work effort. Gitonga (2012) emphasized that a rewarding culture serves to reinforce and motivate teachers to commit themselves to hard work by expending their discretionary work effort at their work place. It was noted that a school culture where teachers were frequently inducted into new teaching strategies, technological ideas and global educational research, were highly motivated and willingly gave their discretionary work effort to the organization. This was also cited by as he emphasized the need for induction of teachers into their work environment, citing induction as a source coping mechanisms to enable teachers to settle and cope within differing school environmental factors.

Culture can build or destroy a school. Culture that integrates all components in the school for best achievement and employees' motivation has been identified as suitable school environmental factor in developed countries but little has been studied on culture as non-influencingschool factor on teachers' discretionary work effort in developing countries by the time of this study and this leaves a gap for further studies. All schools are guided by policy, rules and regulations. The study anticipated that when all stakeholders have the same inspirations and are on the same page, employees got motivated and the school flourishes Mohamad (2015). Unfortunately, toxic school culture is said to keep those employees from growing and in some cases results to demotivated employees who hold back work effort expected at the work place. Building a positive school culture starts with leadership characteristics. Leaders must be willing to make personal sacrifices, and should

work with people rather than working against them if they wish to improve school outcomes (Orindah, 2014).

2.7 Theoretical Frameworks

Robbin (2020) define theory as an explanation on which the research questions are based. It supports the argument of what need to be investigated. A theoretical framework defines the cores and concepts of the study and helps the researcher to identify the relationship between study variables. This study is based on Maslow's Hierarchy of Needs Theory. It is segmented into five sections; each section addresses how a particular need can be applicable to organization setting to induce discretionary work effort of employees.

Maslow hierarchy of needs theory is used to visualize human motivation and factors that bring about personal development (Kremer et al., 2013). Hierarchy of needs theory which proposes that individuals must achieve their expectations before desiring for higher needs (Maslow, 1943) cited in Morris (2014). In the context of educational environment, self-actualization can be understood as personal achievement and fulfillment of organization expectation, a key component of teacher motivation. As basic needs often go neglected in the developing world, Maslow's theory is pertinent to teacher motivation in developing countries (Doughterly & Slevc, 2019). Hierarchy of needs theory emphasizes on fulfillment of basic needs as an important factor to lay the foundation for teachers' desire to improve their professional development and individual achievements. However, a profusion of motivational theories including Incentive theory, McClelland's need theory, competence theory and others) show that satisfaction of basic needs functions as mere extrinsic or external incentive and does not sustain the direction of work effort of an individual.

Application of needs theory helps managers to assist employees to perceive discretionary work effort by motivating their emotional commitments and feelings of doing more. Actualization is the point when employees are assumed to be motivated to employ their best work effort to the organization or for themselves (Asim, 2013). Asim argues that physiological needs in the context of work environment require employers to provide teachers with adequate teaching and learning resources to initiate work satisfaction for them to fulfill work requirement before desiring for more. This applies to work environmental need provided to unleash employees' work effort.

According to Maslow (1943), there is an assumption that lower needs must be achieved first for employees to realize their discretionary work effort. Each category of needs must be addressed one at a time which in this study refers to employees' job descriptions or work expectations. Hierarchy of needs theory was first described by Abraham Maslow in his paper "Theory of human motivation" in 1943. It assumes that individuals can only aim for higher needs after acquiring the basic needs. According to this theory, needs in the lower hierarchy must be partially satisfied before a person attempt or said to be expending extra work effort to satisfy higher- level needs.

Smith and Cronje (1992) argued that people want to maximize what needs to be achieved in life according to their importance. Maslow's hierarchy of needs theory revolves within individual desire that brings about a reasonable degree of motivation and employee satisfaction (Saif et al., 2012). The theory affirms that individual behaviour was triggered by different factors and each has a level of expending discretionary work effort (Morris, 2017). To actualize, a human being must first achieve the basic requirements of the job

before advancing to higher accomplishments. Human needs are motivated by job satisfaction and inspiration for personal growth and need to become better. In this regard, employee's decision to provide extra work effort is motivated by the accomplishment of what was required to be accomplished as per job descriptions, before one is said to be expending extra work effort (Cao et al., 2013).

 According to hierarchy of needs theory, individuals have five levels of needs that must be met before desiring for higher needs; physiological, safety, social, ego, and self-actualizing. In this reference employees require adequate resources to facilitate work effectively. Maslow argues that lower level needs are first satisfied before the next higher level of needs would motivate employees (Maslow, 1943)

Maslow (1943) argues that motivation to work perhaps provides organizational management with a new way of looking at employees' needs and work environment in understanding how employees can be motivated. Hierarchy of needs theory was conceptualized on individual judgments and decision making processes of whether to expend discretionary work effort or not to (Kremer et al., 2013). Employee's work environment plays an important role in motivating discretionary work effort. Basically, the study differentiates between intrinsic motivational factors and extrinsic motivational factors (Tay et al., 2011). Intrinsic motivational factors are defined as job contents that employees have to adhere to as requirements of the job. These include their responsibilities and achievements, while extrinsic factors are more related to the work environmental factors which teachers have significantly no control over them. The theory affirms that lower needs must be met before the next order needs are triggered. In this regard, employees'

discretionary work effort could only be directed after the basic job specifications had been satisfied, once these specifications have been satisfied, which in this study stands for employees job descriptions and expectations by the school, an employee can be said to be expending more work effort or employing discretionary work effort.

Employees' discretionary work effort is based on psychological and emotional needs of humans being desire for greater achievement and the need to leave a legacy. Maslow's hierarchy of needs theory was a psychological humanistic theory among several other theories related to job satisfaction and employee motivation that help to define why employees with comparable abilities, similar experiences, working under the same supervisor and similar working environmental conditions decide to employ varying level of discretionary work effort (Maslow, 2013). According to Maslow, meeting job specifications is the primary motivator and to expend discretionary work effort is a drive to a higher level of employee motivation.

On the same basis, Maslow (1954) argued that for employees to be productive, they must be satisfied with their work environment and job descriptions and willingly strive to do what is beyond that is minimally expected before they can strive for higher needs which was by voluntarily expending extra work. In this argument, teachers must be able to fulfill their basic job requirements before they can exert their discretionary work effort or are said to be offering voluntary services. Hierarchy of needs theory was important to consider when discussing leadership style and teachers motivation in educational centres. Maslow's theory provides a unique path for self-motivation growth and personal development through the hierarchy of needs model which offers a general framework that leaders and employees can

use to develop them. The theory affirms that physiological and safety needs must be met first before attaining progress to higher needs which are related directly to teachers' discretionary work effort.

The importance of this theory to this study is that it recognizes that individual basic needs are prerequisites to human satisfaction and must be met before actualizing to the next higher need. In this study basic needs are classified as requirements for the job, job description, requirements and other responsibilities that an employee is expected to fulfill such as job specific description and employer's expectations before progressing to self-motivation for higher responsibilities. The theory recognizes that work environment must be conducive to make employees feel safe at school and provides opportunities for employees' development through the hierarchy (Kremer et al., 2013)

According to the hierarchy of needs theory by Maslow (1943), cited in Morris (2017) and (Berens, 2013) employee work effort is a factor of concern to all institutions. The competitiveness, independence and psychological related emotions are perceived to be psychological assumptions that influence person to initiate drives necessary for psychological fitness and well-being of a person and if contented, this leads to psychological growth that drives an individual's desire for higher needs. This, according to this theory, was found to be directly related to employees' commitment to their work (Vandenabeele, 2014).Maslow's hierarchy of needs as a theory of human personality emphasizes on individual development and provides an opportunity to help individuals and leaders to nurture an environment where every employee has an opportunity to develop and

actualize. Human beings are motivated to expend more work effort by goal accomplishment. Achieving goals allow them to meet their personal desire (Maslow, 1943).

Figure 2.1

Conceptual framework on the relationship among the study variables

Independent Variables   Dependent Variable

Teaching and Learning Resources

-Physical facilities

-Time

 -Human Resource

Principal's Leadership -
Transformational,

-Transactional,-Autocratic, Laiss-ez-fare

Discretionary Work Effort

 Improved exam results, improved discipline -improved extracurricular activities, improved co-worker support, friendly leadership style

Teacher's Working Characteristics:

-Attitude towards work

-Co-worker support, Subject mastery

School Culture:

-School policies –

Perceived Expectations

-Discretion to Make Decisions

Source; Researcher**.**2019

Conceptual framework is researcher's operational plan of research ideas and process. Its concepts are based on the literature reviewed or theories arrived at. Conceptual framework is a synthesis of interrelated concepts that highlight a concrete understanding of the research problem. This model of conceptual framework is adapted from Education Production Function (EPF) Education Production Function assumes that teachers discretionary work effort is attained as a results of their discretion which could be aggravated by their emotional and psychological attachment to their work. The indicators of teaching and learning resources were the physical facilities which comprised of availability and the status of classrooms, text books and reference books, the status of the available school playgrounds. The school library was a significant indicator of the teaching and learning resources where teachers and students sourced for information. Availability of teaching and learning resources motivated teachers to work hard, cover more work content and more students were involved in teaching and learning process.

Principals' leadership styles were examined as the indicators of teachers discretionary work effort. The leadership styles examined included transformational, transactional, autocratic and laiss-ez-faire. Leadership styles and leadership characteristics inspire teachers 'to be more disciplined, creates a conducive relationship between them and become a source of inspiration to motivate them to get extra engaged which is an evidence of discretionary work effort expended. Indicators of teachers' work characteristics included teachers' attitude towards work, co-worker support and subject mastery. Teachers work characteristics largely define employees' work attitude and feelings towards his/her work and the institution. Teachers work characteristics is influenced by factors within the surrounding work environment inclusive of all the factors that affect and motivate teachers

to be extra committed and engaged. Friendly environment was found to be a source of motivation for teachers to expend more discretion at work place. The final independent variable (school culture) was measured in relation to school policies, perceived employees expectations, and employee's ability to discretion. School culture influences institutional functions and all activities including how employees' behaves, institutional dressing code, work effort exerted and determines organizations outcomes.

The effect of these independent variables on the dependent variable, discretionary work effort was measured to identify the degree of influence on the dependent variable. The indicator of the latter reflected the outcome in form of school academic outcomes. Best outcome is usually as a result of teacher's extra work effort, appropriate organizational behaviour, improved extra-curricular activities and students' discipline. Finally the conceptual framework displays the connectivity and relationship among all the variables.

2.9 Summary of the Literature Review and Research Gap

Employees work effort, both in terms of expending or withholding their work effort has been of great attention to employers and managers in identifying the school related factors that influence teachers' discretionary work effort. In searching for a theoretical framework that could predict under what circumstances do employees spend their time at work, a number of explanations have been developed, especially in the field of organizational behaviour and economic perspective literature. These possible explanations have tried to predict how much time and energy an employee can spend at the work place and have made significant contributions in explaining the emerging paradigms of discretionary work effort. The diverse differences between employees level of discretionary work effort is also related

to work environment as stated by Herzeberg (2003) motivation theory, that environmental factors have the ability to influence employees' level of engagement. Discretionary work effort can be seen as a growing phenomenon in the world of academic and school managers need to cultivate a culture of motivation that keeps employees engaged. The more motivated employees are, the more work effort is expended. Literature suggests that most managers run their institutions to maintain the status quo, while threats and motivational rewards are provided when the results decline or fail to meet the standards.

Literature also indicates that employees' work effort is dependent on the rewards and hence, has failed the set targets to keep employees motivated for best results. This study believes that most countries, including Kenya, have limited resources to provide as incentives to employees so as to keep them motivated, especially now that the country is going through economic turbulence that will influence education outcome for a long time. Consequently, new strategies must be sought to induce employees work effort. Perhaps employees' discretionary work effort, work effort that is voluntary, will be a possible solution to institutional performance bottlenecks in Kenya and especially in Isiolo County.

The economists typically conceptualized discretionary work effort in terms of time and intensity but narrowed it on non-monetary work environment factors that influenced employee's discretionary work effort. On the other hand, OB conceptualizes discretionary work effort in terms of direction. Maslow's hierarchy of needs theory indicates that an employee must first meet the needs of the job requirements as basic needs before actualizing oneself to the next set of needs such as DWE. It has been observed that various environmental factors such as teaching and learning resources, leadership styles applied,

teachers' work characteristics, as well as, school culture have a great influence on schools academic performance. However, most studies on employees' discretionary work effort conducted in developing countries, leaving a literature gap in developing countries. It has also been observed that, secondary schools in Isiolo County have consistently been posting very low KCSE results (Table 1.1). Observations have pointed fingers at the low DWE as a result of poor school environmental factors that have led the researcher to undertake this study to address this issue in Isiolo as far as; KCSE results and related school performance aspects are concerned.

Maslow's hierarchy of needs theory emphasizes on the accomplishment of basic organizational factors before actualizing or expending discretionary work and defines environment as a potential influencer of discretionary work effort, effort that is voluntary and is of organizational effectiveness. The desire for self-actualizing motivates people and literally feel inspired to actively seek to fulfill them for self-satisfaction and organizational effectiveness. Hence, Maslow theory of human motivation identifies the goal of self-transcendence as the final level that an individual can achieve as the capstone of the pyramid that motivates individuals to go beyond their expectations to experience individual satisfaction and organizational effectiveness. The theoretical framework enabled the study to identify those factors that were influential in motivating teachers to offer voluntary work effort for best school outcomes, especially in Isiolo County, where school outcomes were wanting.

Most motivational theories indicate that employee's satisfaction, motivation and extra work effort are mare extrinsic and do not sustain the direction of work effort of an employee. The

desire for every manager is to identify factors that can keep and sustain discretionary work effort; work effort that is voluntary and does not cause suspicion or alertness from the organization. Therefore Pinder (1977) is of the opinion that many theories including; Hygiene theory, Need hierarchy theory, path goal theory, herzberg and many others bear drawbacks and are not relevant for application in actual setting. Pinder argues that motivational theories can be applied after the situation has been identified as a recipe to sustain the direction. Having this background it is paramount to understand that a motivation has the ability to influence direction of discretionary work effort and also to inhibit the same direction. The study assumes that other theories are limited and advocates for motivations, while psychologically, the needs theory influences employees to work hard and strive for higher needs after the first needs have been met.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses activities carried out in this study. It outlines location of the study, research philosophy and research approach, research design, target population, sample and sampling procedures. The chapter also discusses research tools, reliability and validity of the instruments, data analysis procedures and ethical considerations observed.

3.2 Location of the Study

The study was carried out in all public secondary schools in Isiolo County. Isiolo County is positioned in upper Eastern Region. Isiolo County is approximately 285 kilometers North of Nairobi County, the capital of Kenya. Isiolo County has three sub-counties of Merti, Garbatulla and Isiolo which further divides into ten electoral wards with the County headquarters at Isiolo Town, Isiolo, Sub- county formerly central division. According to statistic, national population census 2019, Isiolo County has a total population of 268,002 individuals (Munene, 2019*)*with high population concentration at Isiolo Sub-County (2019, census). The County is rich in livestock farming and majority of inhabitants are pastoralists, however, little subsistence farming is done along Isiolo River. Isiolo County is surrounded by seven counties; Garissa and Samburu Counties to the East, to the North East lies Wajir County, Meru and Tana River Counties to the South West, Marsabit to the North West, with Kitui County to the South East with Samburu and Laikipia counties to the west and south west respectfully. The county covers an area of 25,336.1 square kilometers. Temperatures range between 12-28 degrees Centigrade. The County experiences minimal rainfalls ranging between 150 millimeters to 650 millimeters per annum, this is typical of Arid and

Semi- Arid Lands (ASALs) in Kenya. The major economic activities include small-scale farming, livestock marketing, harvesting of sand and gum Arabica resin.

Observation and records from education office show that Isiolo secondary schools outcome rates among the poorly performing Counties in the Country for several years, posting poor K.C.S.E. results compared to other Counties in the region with similar geographical and climatic conditions, such as, Kitui and Marsabit counties as shown in Table 3.1. Poor school outcomes in the county triggered the attention of several stakeholders and researcher as a teacher in the county wanted to understand what factors within the school environment influenced these outcomes.

Table 3.1

KCSE Analyses for Counties Neighboring Isiolo County for 2018 and 2019

County	ean grade	
	18	19
Tharaka Nithi	?34	?07
Makueni	?05	?10
Embu	?50	?90
Kitui	?55	?25
Meru	?50	?10
Machakos	?21	?45
Marsabit	?30	?50
Isiolo	?80	?10

These performance raised questions on teachers' engagement towards work, involvement of school principals on how to achieve best school outcomes and the influence of work environmental factors and how they eventually affect educational outcomes and the quality of graduates in the county. It was clear that there was no prior study undertaken on the influence of school environmental factors on teachers discretionary work effort in public secondary schools in the county. The perennial poor results posted bypublic secondary schools in Isiolo County stood significantly amongst other counties with similar geographical conditions, posting poor educational outcomes was a point of concern and this was a call for attention for an investigation to find out the influence of school-based environmental factorsand identify a solutions to alleviate educational drawback in Isiolo County. However, if proper measures are not taken to solve educational problems in the

county, Isiolo County would continue to lag behind both socially and economically and this would gradually interfere with other aspects of national development in the county.

3.3 Research Philosophy and Approach

Research philosophy is basically a comprehensive system to view the research problem. It is the researcher's perspective views and development of research problem. It comprises of shared beliefs or a school of thought that informs about ways in which data was collected, analysed and interpreted. Research philosophy focuses on the theoretical philosophic ground on which research work was conducted including assumptions, outlines, images, and attitudes on how legitimate knowledge was developed or derived from phenomena under study (Creswell, 2009; Saunders, 2016). Doughterly and Slevc (2019) described research philosophy as a scientific approach that outlines the source of study data, analysis procedures and interpretation process.

Research philosophy was first discussed by an American philosopher; Thomas Kuhn (1962) to mean a paradigm way of conceptualizing field of research. In educational research, the term paradigm refers to researcher's 'worldview' of viewing the research phenomena (McManus etal., 2017).Accordingly, Kivunja and Kuyini (2017) stated that research philosophy describes how knowledge was developed and how it impacts the world. Another study indicated that philosophical approach determines the direction of scholar's thought and attributing the study findings to a branch of science (Moon et al., 2018).

In the same regard, McManus et al.(2017); Ragab and Arisha(2018) define research philosophy as a comprehensive system or framework that guides researcher's thoughts and beliefs about any issues explored. Philosophy directs the researcher to the overall process of investigation

including selection of research problem, setting research questions, determining the nature and types of reality, knowledge, methodology and value of the research work. Research philosophy helps the researcher visualize research ideas and hence, identifies methodologies and processes on how data would be collected, analyzed, and integrated to generate knowledge (Walliman, 2011).

A Research Approach is a structure of how research is conduced. It contains procedures for collecting and analysing the data and how information is presented. There are five approaches commonly used in research. These are realism, post-modernism, positivism, pragmatism and inter-pretivisism (Fletcher, 2016; Saunders, 2016). Research philosophy adopted in an educational research underpins selection of a research approach and facilitates selection of an appropriate research design. This study adopted a pragmatic philosophical worldview due to its flexibility in choosing and applying appropriate methodologies in solving research problems in the social context. From this perspective, the research phenomenon was viewed as a social construct (Hay, 2016; Pernecky, 2016) by perceiving reality through the perspective of the human mind; constructivism aims at understanding the essence of being and it is usually applied to qualitative research problem.

Accordingly, Bryman (2012)indicated that pragmatism philosophical approach emphasizes on flexibility of methods and techniques used to investigate a research problem. The methods and techniques used in the investigation justify the research approach adopted to understand deeper meaning and knowledge about a given phenomenon (Gichuru, 2017).

Teachers' discretionary work effort was the main concern in this study hence, the flexibility in the choice of methods and techniques for investigating the problem was essential in order to

understand the existing relationship between school environmental factors adopted in secondary schools and teachers' discretionary work effort.

3.4 Research Design

Research design has been defined differently by different scholars. Trochim (2015)described research design as an arrangement of conditions concaved to achieve research objectives and a structure that guide and glue all the elements of a research project together (According to Abutabenjeh and Jaradat (2018) research design is also defined as an approach used in integrating all the elements of a research pragmatically to address a phenomenon. This study defines research design as a system that integrates all the elements in a study to generate solutions to an identified phenomenon in the society. The study embraced descriptive survey research design. Descriptive survey research design is a method of gathering information by application of questionnaires and interviews in a real-life situation to identify the statistical significant of relationship among variables (Creswel, 2014). According to crosswell (2014), a research design enables the researcher to identify the extent to which a variable changes statistically because of the other.

Mixed-method research design as defined by Orodho and Kombo (2013) is a procedure of acquiring information from the subjects by dispensing questionnaires and interview schedules in attempt to understand the problem on the ground. The design was appropriate for this study because descriptive research design is frequently used procedure of gathering information about peoples' attitudes, opinions, and habits and drawing of inferences (Ahuja, 2010) because of its appropriateness, it was convenient to gather large amount of information using questionnaires and interview schedule about people in their real-life situations (Creswel,

2014).Descriptive research design enables the researcher to obtain information about particular characteristics of research subjects in the community or of particular groups of individuals with common interest (Ahuja, 2010).

The researcher applied embedded method of condensing data because both quantitative and qualitative data was collected and analyzes simultaneously. However, qualitative data was used to support and explain the quantitative data (Ryan, 2018; Zukauskas et al., 2018). Adopting this design enabled the researcher to collect and analyze information as it existed on the ground from teachers in different public secondary schools. This study focussed on collecting information from peoples' opinion, views and attitudes; therefore, the research design adopted for this study was appropriate for the study, as it adopted provided an opportunity to put the phenomena into the social context and viewed it according to its relationship with human nature. The researcher used both Qualitative and quantitative approaches in collecting data, analysis and in deriving study conclusions (Creswell, 2014). In this study, flexibility was essential in understanding how school environmental factors influenced teachers' discretionary work effort in Isiolo County.

3.5 Target Population

Target population is the master blue print for the study, that describes individuals that the researcher which to conduct a study and draw conclusions from. It explains variable characteristics and a conclusive set of all items in a population with related behaviour which the researcher has interest in (Schindler, 2019). Target population comprises of definitesampleof individuals or subjects identified from population of interest which the researcher desires to bring out research outcomes (Asiamah et al., 2017; Mack, 2019).

This study targeted all public secondary schools in Isiolo County that had presented candidates for KCSE examinations between 2017 and 2019. According to the Ministry of Education (Isiolo County, 2019), Isiolo County had 48 public secondary schools, hence, 48 principals, and 720 teachers at the time of this study. The target population also included two county Directors of Education (TSC and MoE). The total target population was therefore 770 individuals from whom data was collected. Use of principals' and county directors' opinions in this study was paramount because the two categories of respondents were believed to be holding the mantle to teachers' discretionary work effort. Both county directors, as employers were found to be influencing school environmental factors which were variables of concern in this study. Teachers' opinions constituted their feelings and attitudes towards how the study variables influenced their discretionary work effort at their work place. The researcher was of the opinion that the three categories of respondents would provide reliable data, be more objective and resourceful in providing the necessary data about school environmental factors and teachers' discretionary work effort.

3.6 Sample Size and Sampling Procedures

When conducting research it is rarely possible to collect information from every individual or items in the target population. In that case a sample becomes necessary. Mugenda and Mugenda (2003) defined a sample as a small section of subjects or individuals sampled from the accessible population. A sample consists of a group of individuals selected from the entire population of interest expected to participate in the actual study (Attiwa, 2013). Sampling procedure is defined as a process of selecting a smaller section of the subjects to be representative of the entire population under study. Basically, there are two approaches

of obtaining a sample from the population of study. These approaches are probability and non-probability sampling methods (Wilson, 2010; Uprichard, 2011). Probability sampling consists of four techniques. These include; stratified sampling techniques involve section of a sample from geographical situation. A multi-stage sampling technique involves selection of a sample from strata in a cluster of a population. Cluster sampling technique identifies samples from the geographical situation. Multi-stage sampling technique involves equal selection of samples from clusters. And simple random sampling techniques which provides equal opportunities of selection through random samples (Uprichard, 2011; Etikan & Bala, 2017).

Bryman (2012) defined non- probability sampling technique as a procedure where specific subjects in a population were most likely to be deliberately sampled to reflect the characteristics of the entire population (Ritchie & Lewis, 2012).In any research there four methods of sampling procedures exist in this approach (Vehvar et al., 2016)**.** These include judgemental or purposeful defined by researcher's judgement on the best respondents. Convenience or accidental sampling involves those subjects that are convenient or more accessible. Snowball sampling techniques includes those characterized by using persons as subjects for data collection; and quota samplings causes stratums of the target population by use of demographical variables (Uprichard, 2011; Khan, 2015; Vehvar et al., 2016)**.**

Mugenda and Mugenda (2003) stated that time and resources are major limitations in deciding on the sample size to use in a study, otherwise, the researcher would take the whole population for more detailed results. Consequently, Asiamah et al. (2017) suggest that it is appropriate to draw a sample size between 20%-30 % of the study. In this case, 30% of the population under study was adapted to determine the sample size. Using 30% as

the selection criteria, a sample of 18 principals and 216 teachers were randomly selected from a population of 48 principals and 720 teachers was selected, two county directors. Since there were only two directors, representing the two government institutions, both of them were purposefully identified and included in the sample subjects, making the total sample to be 236. Table 3.1 outlines the sample size in relation to the target population.

Table 3.1

Sample Size in Relation to Target Population

Population	Targeted Population	Sample size
Principals	48	18
Teachers	720	216
County Directors	2	2
Total	770	236

Simple random sampling was used to select 18 secondary school principals from 48 public secondary schools in the County. Using the criteria of 30%, Asiamah et al.(2017)216 teachers were randomly sampled from secondary schools where principals were drawn from. However, because there was a possibility that all the 18 secondary schools did not have the same number of teachers, proportionate random sampling was used to draw the 216 teachers from the 18 secondary schools selected. Since there was only one County

Director of Education (MoE) and one County Director (TSC), both were purposively selected and added to the study sample because their input would generate the required knowledge about school environmental factors and teachers discretionary work effort and at the same time their population was small and specific.

3.7 Research Instruments

Research Instruments are measuring tools designed to acquire information from research subjects on the topic of interest. They can also be defined as instruments used in the collection of data (for example, questionnaires or scales). Kothari (2004) defines research instrument as tools that the researchers use to collect and analyze data required to answer research questions. The selection of research tools is guided by the type of population under study, and nature of information to be collected, time available, research design, and study objectives. These tools must be appropriate for the intended purpose and be timely when collecting information for effectiveness and quality of data. Research tools must be fair and free from bias, as well as, friendly in relation to questions and structure. The main research instruments adopted for this study were questionnaires and interview schedules. Information from teachers and principals was collected using open and closed headed questionnaires while both directors were subjected to face to face interview by the researcher. These instruments were appropriate and convenient when collecting data from a large population and when eliciting information on people's respective view such as opinions, attitude and their feelings towards specific situation. The overall aim of the study was to establish the effect of school environmental factors on teachers discretionary work effort in Isiolo County. The researcher was mainly concerned with the views, opinions, perceptions, feelings, and attitudes of principals, teachers, and county directors, of

education, hence, questionnaires and interview schedules were the most suitable instruments for this study as influenced by literature review in chapter two on the development of specific questions in the research instruments.

3.7.1 Questionnaire

A questionnaire is a research instrument comprising of a series of questions or comprising of an interview format for the purpose of gathering information from respondents. According to Oliveira (2018), a questionnaire is a research instrument that comprises of structured and un-structured questions guided by the research objectives. Kothari (2004) defines a research questionnaire as a research instrument that allows measurements of information against a particular view point. It is suitable for this study because it is relatively cheap, easy to construct and cost effective in terms of time and money and is also easy to administer especially when a large population of respondents is involved.

Orodho and Kombo (2013)and Lewis and Thornhill (2016) defines a questionnaire as a friendly research instrument that is less expensive, requires less time to prepare and permits collection of data from a large number of respondents within a given time frame. Lewis and Thornhill (2016) also asserted that questionnaires have been commonly used in both qualitative and quantitative study due to their ease of standardization. The population for this study was primarily literate; hence, they did not experience hardship in handling and responding to questions. Questionnaires were also appropriate because they collect data from respondents without the influence of the researcher, and due to diversity of the study location, it was appropriate regarding time and resources.

These instruments were suitable for this study because the study expected information from social situation where individuals were expected to give their views, opinions and attitudes on how school environmental factors influenced their ability to make discretions towards their voluntary work effort. A set of questionnaires were developed, for both principals and teachers. Each questionnaire had six sections. Most of the questions were closed-ended, and in Likert scales ranging from highly disagree to highly agree. Consequently, the open-ended questions enabled the researcher to acquire additional information from the respondents as guided by the conceptual framework. These closed-ended and Likert scale questions were used to gather quantitative and qualitative information from the respondents (Bhat, 2019).

7.1 (a) Principals' questionnaire

The principal's questionnaire consisted of section A to F. Section A gathered principals' demographic information which was related to the study. These included gender, age, length of stay in the institution, professional and academic qualifications, number of teachers and teaching experience as a principal of that school. Section B collected data based on teaching and learning resources and teachers' discretionary work effort. Section C of the questionnaire consist of questions to capture information on the influence of leadership characteristics and teachers' discretionary work effort, while section D concentrated on gathering information on teachers work characteristics. Information on influence of school culture and the dependent variable; teachers' discretionary work effort was highlighted in the final sections of the questionnaire. The questionnaire also depicted information on other variables of the study on how they influence teachers' ability to expend work effort at work place.

3.7.1(b) Teacher's questionnaire

Teacher's questionnaire consisted of six (6) sections A to F. Section A was used to gather demographic information of the respondents these included age, academic and professional qualifications and other information related to the study. Section B to E gathered information in reference to the study objectives as stated on the principals' questionnaire above, while section F sought information specifically on the dependent variables of the study, teachers discretionary work effort.

3.7.2 Interview schedule

Interview schedule consist of written down questions, which are structured, semi-structured or unstructured that the researcher uses to gather information from the respondents during an interviewing session. It allows in-depth understanding of respondents' thoughts, mastery, viewpoints and understanding of the phenomenon under study (Sutton & Austin, 2015; Pulla & Carter, 2018; Oliveira et al., 2018). Creswel (2014) define interview schedule as a research tool used to gather information commonly applied in qualitative study. Cooper and Schindler (2011) described interview schedule as a data collection instrument purposed to collect views and in-depth information about people attitudes, opinion, likes and dislikes, feelings, experiences, and understanding that help to unearth the story behind the participant's understanding. Orodho and Kombo (2013) described interview as a conversation between two or more people with a purpose of gathering information to derive answers to identified phenomenon.

Interviewing can be conducted face-to-face or over the telephone. Interviewing is an appropriate research tool when in-depth information on people's opinions, thoughts, attitude, and feelings needs are required to answer research questions. Interviews are more

useful when the topic of inquiry relates to issues that require complex questioning and considerable probing (Creswel, 2014). Interview schedules are designed differently depending on the objectives of the study. This study adopted the semi-structured interview procedures and the development of the interviews comprised of a series of questions that all participants had to answer. Semi-structured interview schedules were useful when collect in-depth information is required from a number of respondents such as teachers or opinion leaders (Orodho and Kombo, 2013).

Interview schedule allows the respondent to give personal views and opinions more openly, independently and make suggestions that may have been overlooked in the questionnaires. According to Creswel (2014), a semi-structured interview has more advantages over structured and unstructured interviews because of its ability to collect accurate details on the study subject. Two semi structured interview schedules were prepared, one for each of the directors (MoE and TSC).Interview schedule for County Directors consisted of four six sections A to E. Section A elicited information on the demographic data related to the study, while section B consisted of items related to research objectives one on availability of teaching and learning resources, section C consisted of information on the influence of leadership characteristics, section D concentrated on gathering information on teachers work characteristics finally section E and F sought information on the influence of school culture on teachers discretionary work effort and Teachers discretionary Work Effort, respectively. Both interviews were conducted face to face between the researcher and the respondents on how school environmental factors influences teachers' ability to expend discretionary work effort.

3.8 Piloting of Research Instruments

Piloting of research instrument teachers Discretionary is a process of testing the feasibility of the project. Pre-testing of the research instruments provides the groundwork in research project and the results that guide in methodology that the researcher uses when collecting data. Pilot study also enables the researcher to identify and familiarize oneself with the research tools to be used in collecting information, identify sections that need to be enhanced and questions that appeared ambiguous, wrongly spelt, missing words or those that needed to be improved or redesigned. The instruments were then improved, clarified or removed from the actual study as opined by (Oliveira et al.,2018).Accordingly, Bryman (2001) emphasized on the importance of conducting a pilot study before the actual research commenced in order to ascertain that research instruments functions well and met the objectives of the study. According to Orodho and Kombo (2013), piloting is carried out to check validity and reliability of the research instruments, to clarify questions that are redundant and not well stated as well as eliminates ambiguity in wording and unclear items.

The main objective of piloting the instruments was to provide testing of the research instruments on a similar but small sample of the respondents. Piloting of research instruments is a preparatory small-scale study that a researcher undertakes in order to gain understanding on how best to conduct the actual research. Analysis from the pilot study helped the researcher to identify and refine research interview questions as well as identifying the best research design and data analysis techniques used. Pilot study enabled the researcher to estimate how much time and what resources were required for the purpose of research project and implementation process (Zohrabi, 2013).

According to Connelly (2008), a sample for pilot study should consist of 10% of the projected larger study population. Before the actual data collection, the researcher conducted a feasibility study in Samburu County involving two schools where samples were randomly sampled. There were four public secondary schools in Samburu East sub-county (two for boys and two for girls) To get the actual sample for piloting the instrument for this study, two schools one for boys and one for girls) were randomly sampled from Samburu East Sub- County. Samburu County lies on similar geographical location with Isiolo County and teachers experience similar conditions. Questionnaires were administered to two principals and 20 teachers, 10 from each sampled schools, making a sample of 22 individuals for the pilot study. Since there were only two county directors, one from TSC and the other one from MoE i.e County director TSC and County director MoE. The respondents were not subjected to the pilot study. Instruments were tested through two sub-county directors making a sample of 24 respondents. This was because sub-county directors were believed to play a similar role in educational matters in the absence of county directors but hold different work position. The researcher visited the sampled secondary schools and personally   administered the research instruments. After instruments were filled, the researcher collected the questionnaires and coded them for analyses. Analyzed results were forwarded to the supervisors for further advice.

3.8.1: Validity of instruments

Validity of instruments is described as the extent to which a research tool measures what it is accepted to measure. Instrument's validity is established by correlating the scores with scores from a similar instrument. Heale (2015) stated that validity is concerned with the

degree to which a test measures what it's expected to measure and to what extent the analyzed data represent the problem under study. Validity is assumptions which based on the study results. Without standard instrument validity, tests can be mismanaged and may have disastrous impacts on the subjects being measured. Consequently, when taking educational research, use of invalid test measurements may result to dangerous conclusions, especially when the analyzed results are for the purpose of making educational policies in schools or other business enterprises. The question is, is the test valid for the purpose of the study?

Accordingly, Liu (2010) and Schindler (2019) observed that instruments validity can be measured in four forms; Content related validity; construct related validity and criterion-related and face related validity. Content validity is concerned with how well the content of the instrument is applicable when measuring validity on content or trait of the property (Zohrabi, 2013). Construct validity: construct validity is used to measure aspects that cannot be measured directly such as people's attitude, opinions or beliefs, Construct validity involves the extent to which certain explanatory concepts or qualities account for performance.

Criterion-related validity is applicable when measuring correlation coefficient. Two measurements of criterion; concurrent and predictive validity focuses on how well the instrument compares with external characteristic or behaviour of variables being examined (Saunders et al., 2016). Face validity is also used to indicate whether the instrument, on the face of it, appears to measure what it claims to measure. These forms of validity criterion, construct, content and face validity must be appropriate to the research gap identified. Instrument validity determines whether the instruments adequately test what was supposed

to be tested and the extent to which the analysis were accurate (Schindler, 2019). The content validity of content this study was determined by using expert judgment. Kothari (2014) defines content validity as the degree to which the sample of an instrument measures the content that the tool is designed to measure. This was determined by using a panel of experts who deliberates on how well the measuring instrument meets the standards. The researcher used educational experts in the realizing instruments validity. The ratings and comments helped in forming corrections required before the final tools were printed. Criterion validity was censured by creating a concrete relationship between the study instruments and consulting tools used in past studies as discussed in chapter two.

Reviewed literature in chapter two was consulted widely to ensure construct validity. Constructive criticisms from supervisors also helped the researcher to ensure that all the items of the measurement were included. To further confirm that face validity was evident in the research instruments, there was careful formation of the questions to promote clarity in the tools. By ministering a pre-test, all the ambiguous questions were re-visited by either rephrasing or deleting them. Statements that were likely to be misunderstood were detected and revised, accordingly.

This study used both construct and content validity. Liu (2010) define construct validity as the extent to which a measurement instrument precisely represents a construct that cannot be measured directly such as attitude, opinion and belief. Validating of research instruments was done in two secondary schools within Samburu County; any item that failed to meet the threshold was modified and others discarded. The instruments were verified by the supervisors. Validating research instruments was therefore done in order to provide the

truthfulness of the results, the accuracy and meaningfulness of the study results (Zohrabi, 2013)as well as, the technical soundness of the results.

3.8.2: Reliability of the instruments

Reliability of instruments refers to measurement that provides results that are consistence, precise, and trust worth (Schindler, 2011). Reliability indicates the extent to which research findings are error-free, ensures consistent measurement of the results across various items in the instrument (Mohajan, 2017). Generally, there are four types of instruments reliabilities. These include inter-rater/observer reliability which assesses the degree to which different raters give consistent estimates of the same phenomenon from one time to another. Parallel-forms reliability assesses the consistency of results of two tests constructed in the same way from the same content within a test. Mohajan (2017) stated that reliability of the instruments focuses on the degree to which empirical indicators are consistent when measurement is performed at different times across two or more attempts to measure the theoretical concept. Drost (2011) defined reliability as the degree to which consistent results are achieved when instruments are administered to the same subjects over time. In this study, reliability is defined as the degree to which outcomes of a test are consistence over time and reliable representation of the population under study. Probably, if under a similar approach, the findings of the population under study could be replicated giving the same results, then the testing instruments are considered accurate. In testing the reliability of the instrument, the test-retest technique was used. The researcher administered the instruments to a representative group. Then, the instruments were re-administered after a week. This method was also applied to sub-county directors to test the reliability of interview schedules. The results obtained from the first and second trials were statistically correlated

using SPSS to determine the instrument's reliability. Cronbach's Alpha level was used to determine the reliability of the study's constructs was applied to determine the degree of correlation between the two tests. A threshold correlation coefficient of 0.7 and above was adopted as recommended by (Mugenda & Mugenda, 2003). Orodho (2003) suggest that a reliability coefficient of 0.70 was acceptable and the more the reliability coefficient was closer to 1.00 the stronger the reliability. If the correlation index was below 0.70, the items were revisited.

3.9 Data Collection Techniques.

In a research, data collection refers to systems or procedures for gathering data from different respondents to acquire information about the actual status of an area of interest (Jovanic et al., 2020). Accurate data collection equips the researcher with answers to research questions, protect research integrity and predict about probabilities of a future study (Vuong et al., 2018). Before data collection commenced, the researcher sought for an introductory letter from Kenya Methodist University. The purpose of the letter was to facilitate request for research authorization letter from National Commission for Science, Technology and Innovation (NACOSTI). The permit granted was used to obtain permission and authority letter from the Ministry of Education, Isiolo County, and Teachers Service Commission, Isiolo County and also from the County Commissioner Isiolo County in order to be granted authority to administer the research instruments and to authorize the data collected from county directors, principals and teachers. The researcher finally made appointments with individual principals as to when the questionnaires could be administered. Collection of data was done through administration of face to face questionnaires to the principals and teachers.

Due to diversity and terrain of the county, the researcher appointed two research assistants; both of them were trained two days before the actual data collection exercise commenced. The researcher accompanied the research assistants as the administration of questionnaires was taking place, supervised issuing of the questionnaires and witnessed filling in the questionnaires by both the principals and the teachers. The researcher personally gave instructions to the respondents before the actual filling of the questionnaires by the respondents. The researcher attended to principals' questionnaires while the assistant supervised filling in of the questionnaires by the teachers. All the filled in questionnaires were counter checked for anomalies and gaps. Corrections were made before collection and the research assistants collected the filled questionnaires from the respondents, checked fillings gaps for coding purposes. All questionnaires were numbered chronologically for accountability. These were kept in looked drawers for safety before analyzing process took place. Data collection exercise took approximately one month. After all the questionnaires had been collected, the researcher coded them and kept them in lockable drawers for safety. The researcher visited both County Director TSC and MoE offices to conduct the interviews. Prior to conducting the interviews, appointments were made with the directors as to the most convenient time. In this study, interviews were done face-to face because the respondents were available and it was suitable because the respondents could communicate freely. The researcher conducted the interviews personally; this enabled the researcher to identify major factors through prompting and probing questions that were highly related to how school environmental factors influenced teachers' discretionary work effort in secondary school teachers in Isiolo County.

Interviewing enhanced information gathered by focusing on the facial expression of the respondents to understand the deeper meaning of the questions that allowed further synchronization of the findings (Asiamah et al., 2017). The interview session for the two county directors took place on the same date when both directors' work schedules permitted the activity. Prior to the end of the field activities, attempts were made to compare objectives of the study with the data collected. This move as described by (Whitham & Powers, 2016) enabled the researcher to identify gaps that were overlooked and ascertain if the document was fit for analysis or not. Gathered data from interviews was coded and safely kept for analysis (Jolly, 2012).

3.10 Data Analysis Procedures and Presentation

Data analysis is a continuous process of systematically applying statistical or logical techniques to condense, illustrate, evaluate and describe data to give meaningful understanding (Kothari, 2004; Boettger &Lam, 2013). This process involves sorting out, categorizing, and ordering, manipulating and summarizing data to obtain clarity on whether to approve or disapprove research questions. Data accruing from most studies in social science are both quantitative and qualitative in nature and are analyzed by use of descriptive and inferential statistics.

3.10.1 Analysis of qualitative data

Qualitative data is non-numerical in nature. It is data that cannot be easily expressed using numbers and it is mostly obtained from transcripts, interviews or questionnaires. Qualitative data comprises of videos, observations, pictures and narratives (Centre for Innovation in Research and Training [CITR], 2018). Analyzes of qualitative data mainly

uses percentages and measures of central tendency to show responses to questions (Okiya, 2008) and allows the researcher to explore ideas and enhances explanation of quantitative data. The qualitative data in this study was analyzed using SPSS version 24. For completeness and accuracy, data collected using questionnaires was first cleaned to remove faults and incomplete information. This was followed by coding, data entry, and transformation to allow grouping of large set of data into categories. It comprise of words, observations, pictures and videos (CIRT, 2018). Analysis of qualitative data from interviews and open-ended items was done using descriptive and content analysis (Mitchell & Jolly, 2012).

Data was first sorted out and categorized it was then coded for the purpose of keying it into the computer for analysis using SPSS version 24.0 computer software. This version is a technique that makes inferences by identifying specific characteristics (themes) and categories of the messages and it is frequently applied in describing attributes of the message. These messages were described using narratives and descriptive statistics such as percentages and frequencies.

Thematic and content analysis technique was also used in reporting qualitative findings where some general statements and narratives were transcribed as noted down and reported directly and discussions provided in chapter four. Data gathered from interviews and open-ended questions, were analyzed for common themes that were cross-examined to identify more patterns in the information, which brought about deductive and conclusive statements. However, in some instances, direct quotations of narratives were reported as recorded in the notebook to promote clarity.

3.10.2 Analysis of quantitative data

Quantitative data is numerical in nature and uses percentages and measures of central tendency to identify different values in the study distribution (Okiya, 2008). Questionnaires were used to collect quantitative data. Quantitative data collected was first cleaned to remove faultiness and incomplete ones, and this was followed by coding, data entry, and transformation to allow use of computer software analysis. Finally, appropriate statistical analyses were carried out for completeness and accuracy. Both descriptive and inferential statistics were used in the process of data analysis. Descriptive statistics such as percentages were computed and presented in form of tables and graphs. Correlation coefficients analyses were also computed to identify the association between each of the four independent variables and the dependent variable. Finally, a combined regression analysis model was conducted to test the influence of each school environmental factors on teachers' discretionary work effort in public secondary schools in Isiolo County.

The overall regression model is provided below.

$$Y = C + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where:

Y = Teachers' discretionary work effort

C = Constant

β = Slope coefficient of independent variables

X_1 = availability of teaching and learning resources

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X2 = leadership style

X3= Teacher work characteristics

X4 = School culture

e = error

Diagnostic tests were carried out to establish the eligibility of statistical analysis.

3.11 Ethical Research Considerations

The concept of research ethics entails those principles that guide the researcher on how to conduct the study and report the findings without misinterpretation or intention to harm participants or members of the society. According to Mugenda and Mugenda (2010), protecting the right and wellbeing of the research subjects is an obligation to all persons involved in the study. Practicing ethical procedures ensures that validity and authentic results of the study are obtained. Ethical procedures also guarantee error free and credible result. Research ethics involves the application of fundamental particles which includes the design and research procedures as well as implementation of research in respect towards society and others. According to Resnik (2011), ethical factors are defined as the principles of conduct, which are considered appropriate especially those of given professional groups. Ethical factors help to determine the differences between acceptable and non-acceptable behaviour and serve as guideline when conducting a study (Saunders et al., 2016).

Ritchie and Lewis (2012) and Fouka and Mantzorou (2011)observed that it is essential to identify specific areas of ethical consideration when undertaking a study in social sciences so

that confidentiality is upheld as a measure to safeguard the privacy of all persons, to build trust and rapport with study participants and to maintain ethical standards as well as the integrity of the research process. Confidentiality involves non-disclosure of research data or information from the respondents to other parties for their own benefits other than the intended purpose.

In conducting any research, it is paramount that ethical considerations be given ultimate concentration. Application of moral code and professionalism are necessary when conducting, analyzing and reporting research findings in respect for democracy, respect for truth and respect for persons (National Commission for Science, Technology and Innovation [NACOSTI], 2019). Ethical considerations aim at promoting the research purpose by instilling veritable information, truth and prevention of great misconduct. Ethical consideration promotes accountability, honesty, mutual respect and fairness among individuals taking the study as well as appropriate use of public funds and public support, however, the researcher's responsibility was to ensure protection of the welfare and dignity of the research subjects. The importance of ethical considerations in a study is presented with examples in the table 3.2

Table 3.2

Ethical considerations

Ethics	Examples
Minimizing error to promote reliability, thfulness and originality of knowledge.	Falsifying alterations and misrepresentation of data which can cause serious danger especially when using information to make decisions.
To promote values of collaborative work.	Respecting other researchers' work by bestowing proper credentials to their contribution in the research filed.
Public accountability.	Maintaining government and university policies on subject protection and care. This guarantee the researcher public accountability.
Maintenance of quality & integrity along with moral and social values.	Researchers put lives at risk when they fabricate data in the study of medicine.

Before the actual study commenced, the researcher obtained informed consent of all participants. Participation was voluntary and participants had rights to participate or withdraw from the study at any level if they felt to do so. To guarantee confidentiality the participants were not required to write their names on the questionnaire. The researcher ensured participants that their personal identities and that of their institution would not be pertinent features in this study. All participants were assured that the information provided was useful for the study purpose only and that no unauthorized person could get access to the information. Participants' identities were kept confidential and only known to the persons carrying out the study. The research was carried out in an ethical manner; participants were treated with dignity and utmost respect. The researcher personally attended to all questions that the participants needed to understand in relation to the study. To guarantee confidentiality and privacy of individual's information provided the researcher and the two

research assistants administered the instruments, monitored the filling exercise and collected filled questionnaires personally. Questionnaires collected were coded and kept safely for analysis. in order to maintain a mature relationship, the researcher promised to submit a copy of the findings to Isiolo County Education Office on request for reference by the respondents. All the schools that took part in the study will be acknowledged, so that goodwill would be maintained.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

The results and discussions based on the study's findings are presented in this chapter. It interprets the findings and discusses their consequences. The findings on the variables are presented according to the objectives of the study. The chapter begins by providing key information regarding the reliability test, response rate, and background information of respondents.

4.2 Reliability of the measuring instruments

Before the main study, instruments were pre-tested as detailed in chapter three, with the goal of demonstrating the reliability of the research instruments in gathering trustworthy data. This study used Cronbach's Alpha to determine the reliability of the study's constructs, as explained in chapter three. Table 4.1 summarizes the findings in relation to the study's key objectives.

Table 4.1:

Reliability Results for the Study's Main Constructs

Main constructs of the study	Cronbach's Alpha Principals	Cronbach's AlphaTeachers
Teaching and learning resources (X1)	0. 92857	0.91666
Principal's leadership characteristics (X2)	0 .85714	0.939
Teachers' work characteristics (X3)	0 .71428	0.875
The school culture (X4)	0.857	0.916
Teachers' Performance (Y)	0 .843	0.904

According to the data in Table 4.1, the Cronbach's coefficient alpha value for all constructs is greater than 0.7, which is appropriate in social sciences (Bryan, 2014). This demonstrates that all research variables' measuring instruments were trustworthy for the analysis of data.

4.3 Response Rate

This section contains respondents' response rates of principals, teachers and county educational administrators. The study focused on 48 secondary schools in Isiolo County, where 48 principals, 720 teachers and 2 county directors were targeted. Out of this target, the study sampled 18 principals, 216 teachers and 2 county educational administrators. From the administered questionnaires, 216 (100%) were returned from teachers and 14(85.71%) from the principals. The returned questionnaires were vetted appropriately and met the inclusion criteria for the analysis. The results are displayed on Table 4.2.

Table 4.2

Response Rate

Respondent	Sample size	Frequency on Actual response	Percentage Return rate
Teachers	216	216	100%
Principals	18	14	77.8%
Directors	2	2	100%
Total	245	232	98.3%

Despite the hardship in the area the study achieved an overall response rate of 98.3%. The high response rate was realized because of good prior preparation and planning of the field work. This was to find out work characteristic of employees which can easily be noticed from their behaviour. According to Rosenberg and Stanton (2007), a fifty percent response rate is regarded adequate for self-administered questionnaires (Kothari, 2009). Consequently, a response rate of 98.3% was quite acceptable for the purpose of data analysis.

4.4 Demographic Information of Participants

The first section of the surveys gathered demographic data from participants. Thisinformation is seen as critical in offering a deeper knowledge of the respondents, so laying the groundwork for a full discussion of study findings. The researcher concentrated on the respondent's job group, highest academic credentials, duration of stay in same work

station, employer, work experience, constituency one worked in, and participant's gender in this study. In the next parts, the findings are examined and the outcomes are reported.

4.4.1 Respondents' Job Group (TSC Scale)

This sub-section focused on bio-data collected on respondent's job group for CDE and TSCD job scales for teachers, TSC County Director and principals. The study was interested in understanding the job group of CDE, TSCCD, principals and teachers because discretionary work effort or ability to go an extra mile was believed to be influenced by salary and remunerations of teachers. Employees with high job group level earn more salaries compared to those with lower job group. The study therefore intended to explore the effect of job group on teachers' discretionary work effort and the amount to which job group affected teacher motivation to be more involved at work as shown in table 4.3

Table 4.3

Respondents' Job Group

Job scale	C3	C4	C5	D1	D2	R	%
CDE/TSC D	-	-	-	-	-	2	2
Principals				11	3		14
Teachers	24	125	63	03	-	-	216
Total	24	125	63	15	3	2	232

According to information stated on Table 4.3, a reasonable number of teachers 24 were at TSC scale C3 which was graduate and diploma levels representing 10.34% of the total participants with the lowest job group in the study. The majority of the respondents,

125(53.89%) were at TSC scale C4 comprising the highest number of participants. A significant number of teachers 63 which is 27.15% were at C5, while 11 principals and 3 teachers were at TSC job scale D1 which represented 6.03% of the study participants. Three principals fell at TSC scale D2 which was the highest category of teachers. One (1) County Director (Ministry of Education) and one (1) county director (TSC) fell at job group R at 0.86%. This was expected because the two directors represented senior officers in the county. The results are showing that the majority of teachers are in job group C4 and C5 while a significant numbers are also in C3. The job group C4, C5 and C3 are low grades in the teaching profession and have low salary. Employee's job group is an indication of a well remunerated employee. Better remuneration is a source of motivation. Hierarchy of needs theory emphasizes on well-paying job for employee to be able to meet their social amenities. With this revelation, the study was justified to analyze how this was affecting the teachers 'discretionary work effort.

4.4.2 Respondents' employer

Information regarding the employer was obtained from each category of respondents. The study was specifically interested in understanding the respondents' employer; type of employment, salary and remunerations which were critical in influencing employees work effort. Teachers and principals were part of the organizational factors and were believed to directly interact with the school environment in the process of implementing their duties and this interaction either enhanced or inhibited teachers' discretionary work effort. The information on Teachers' employer is summarized in 4.4.

Table 4.4

Respondents 'Employer

Respondents	Ministry		TSC		BOM	
	Frequency	%	Frequency	%	Frequency	%
CDE/TSCD	1	.430	1	.430	0	0
Principals	0	0	14	6.03	0	0
Teachers	0	0	196	84.44	20	8.62
Total	1	0.430	211	90.94	20	8.62

The survey found that the vast majority of respondents, 206 (90.749 percent), worked for the Teachers Service Commission. This included the TSCD, the principals and majority of the teachers. Some of the respondents including CDE 1(.440%) and 20 (8.11%) of the teachers were working for Ministry of Education and School Board of Management respectively. Those working under TSC were director TSCD 1 (.440%), 196 (84.44%) teachers and 14 (6.03%) principals. The Director from the Ministry of Education was a respondent of interest in this study; it was believed that since the declaration of free primary and subsidized secondary education by the government in 2013, the Ministry of Education has been providing schools with the teaching and learning aids, grants for infrastructure and monitory support to meet budgetary and other miscellaneous expenses. The findings therefore show majority of the respondents worked for TSC and MoE respectively .This concurs with Owonyele (2017) who stated that employers were responsible for how their employees got motivated, were source of employee's motivation and could either inhibit or enhance the level of discretionary work effort expended at work place.

4.4.3 Respondents' educational level

Labor economics and organizational sciences literatures showing people' educational attainment was connected with good career outcomes, such as wage level, number of promotions, growth possibilities, and career progress (Morris, 2017). It was also evident that most organizations, including learning institutions, use level of education as a parameter for employment and indicator of persons levels of productivity, and apply it as a prerequisite for hiring decisions. Information regarding the respondents' employment is provided in Table 4.5.

Table 4.5

Respondents' Educational Level

Respondents	CDE		Principals		Teachers	
	Frequency	%	Frequency	%	Frequency	%
PhD	1	.431	0	0	0	0
Masters	1	.431	5	2.155	12	5.174
Degree	0	0	9	3.879	184	79.310
Diploma	0	0	0	0	20	8.62
Total	1	0.430	211	90.94	20	8.62

The analysis in Table 4.5 indicates that the highest numbers of respondents, 83.189%wereBachelor's degree holders, Seven point nine three percent (7.93%) were master degree holders, and 7.76% were diploma holders. Only one (0.431%) of the respondents was a PhD holder. This indicated that all the respondents were knowledgeable on the information sought in this study. Education level of respondents was assumed to help the researcher to acquire relevant data as supported by Sogoni (2017) and Wambui (2017)

who affirmed the importance of education in organizational setup as being critical. This gave the study the necessary confidence that the respondents had wide knowledge and would confidently comments on multiple dimensions of teachers' work characteristics reflected in their levels of discretionary work effort and consequently, institutional outcome.

4.4.4 Teaching experience of principals and teachers

Education and job experience are the two types of human capital that people are most likely to gain over their career lives. In this study, experience was considered to be gained upon onset of placement where the individual interacted with work to gain knowledge and skills. The work experience was relevant in this study to demonstrate knowledge gained and the ability to impact that knowledge to students for best outcome. A summary of information regarding work experience of Principals and Teachers is provided in Table 4.6

Table 4.6

Principals' and Teachers' Teaching Experience

Years of service	Principals		Teachers	
	Frequency	%	Frequency	%
1-3years	0	0	10	4.62
4 – 6 years	3	21.43	143	66.20
7 -9 years	4	28.57	14	6.49
10+ years	7	50.00	49	22.69

The findings in Table 4.6indicate that majority of principals, 7 (50.00%) had a teaching experience of 9-10 years and above, 3 (21.43%) had served for 3-6 years, while 4 (28.57%) had served for 6-9 years. None of the principals had a leadership experience of less than 3 years. The analysis concluded that principals had adequate knowledge in administrative activities and therefore had enough experience to ignite employees discretionary work effort at the work place for best outcomes.

The experiences of teachers indicate that the majority 143 (66.20%) had teaching experience of 3-6 years, 49 (22.69%) had work experience of 9-10+ years, 14 (6.49%) had an experience of 6-8 years while 10 (4.62%) had an experience of not less than one to three years. The study observed that respondents had adequate work experience, hence they were inposition to provide useful and objectively comments regarding the discretionary work effort as it applied to them. Work experienced enhanced mastery of subjects and promoted discretionary work effort of the employee. This information enabled the researcher to identify the relationship between work effort and work experience at work place. The CDE

and TSCD pointed out and emphasized on the importance of work experience when appointing and promoting teachers. They stated that experience made teachers knowledgeable and influenced the work effort. These findings concurred with the situation observed by Sogoni (2017) and Wambui (2017) where teachers, head-teachers and deputy-head-teachers possessed requisite working experiences in secondary schools in Isiolo County.

4.4.5 Gender of the Respondents

The gender of the respondents was sought to provide a picture and background to the information from teachers and principals. The same is summarized in Table 4.7.

Table 4.7

Gender Distribution of Respondents

Respondents	Male		Female	
	Frequency	%	Frequency	%
Teachers	164	70.69	52	22.41
Principals	10	4.31	4	1.72
Directors	2	0.862	0	0
Total	176	75.862	56	24.14

The findings in Table 4.7 show that there were more male teachers 176 (75.862%) as compared to female teachers at 56 (24.14%) in secondary schools in Isiolo County with

more female teachers concentrated in major towns. This was expected due to distance experienced between schools and availability of social amenities. According to information gathered from the education office, most of the female teachers were concentrated in major towns where social amenities were available which usually made it difficult for women teachers to work in the interior as noted by Boru (2015). Insecurity and harsh conditions, lack of proper housing facilities and long distance from places of residents contributed to minimal number of female teachers in the county. Similar reasons had been noted by Qaiser et al. (2015) in Karak District, Khyber Pakhtunkhwa in Pakistan. The results are however contrary to those reported in Nyeri County by the Digital Star on 3rd February (2022) which noted that some school had no male teacher where majority of the teachers were female.

Classes Taught by Teachers and Principals

The information regarding the number of classes taught by teachers and principals was also sought. It was important to understand classes the respondents were teaching to identify the impact of individual participants in organization outcomes and level of discretionary work effort expended at the work place. Analysis on Table 4.8 indicates the number of teachers and principals teaching the classes from Form one to Form four table 4.8

Table 4.8

Classes Taught by Teachers and Principals

Respondents	Teachers		Principals	
	Frequency	%	Frequency	%
Forms 1 and 2	162	70.43	6	2.6
Forms3 and 4	54	23.48	8	3.48
Total	216	93.91	14	6.08

The analysis shows that 70.43% of the teachers and 2.67% of the principals were teaching between Form one and Form two classes, 23.48 % of teachers and 3.48% of the principals handled Form three and Form four. It was, therefore noticed that a greater percentage of respondents 77.03% of teachers handled classes between Form one and Form two, while more principals 26.96% of the principals handled Forms three and Form four. The information helped to shed lights on the context of the discretionary work effort expended at the work place.

4.5 Descriptive Results on Various School environmental Factors

The study's first objective was to investigate the impact of teaching/learning materials on teachers' discretionary work effort in public secondary schools in Isiolo County. It addressed the specified indicators of material resources, human resources, and time.

4.5.1 Responses of teachers on the availability of teaching and learning resources.

Teaching and learning resources are tools that help instructors and students transmit information and discover new things. Learning tools in the modern day are more than just

study materials. Every teacher has different teaching needs and styles and requires different information materials and therefore; the availability and adequacy of learning resources in a school usually motivate teachers to expend discretionary work effort. To establish the situation, teachers were asked to give their opinion regarding the availability and adequacy of teaching and learning resources at their schools. Opinions were sought on learning resources such as books, charts, television, projectors, laptops / computers, and reagents. Table 4.9 shows the analysis of data collected from 216 teachers table 4.9

Table 4.9

Learning resources and teachers discretionary work effort

Availability of material resources (n=216)	Available and adequate		Available but inadequate	
	Frequency	%	Frequency	%
Books	171	79.17	41	18.98
Charts/maps	153	70.83	63	29.66
Television	19	8.79	197	91.203
Projectors	127	58.79	89	41.20
Laptops /computers	2	0.925	214	99.07
Laboratory reagent/material	162	75	54	25

The analysis in Table 4.9 sheds light on the importance of teaching and learning resources in enhancing teacher discretionary work effort. Eighty one percent (81.01%) of teachers stated that books were available and adequate while 19% indicated availability of books although inadequate. However four respondents were of neutral opinion at (1.85%). Availability of books enhances teacher's ability to work hard (Chepsiror, 2020; Kurgatt& Omuna, 2016; Imbahala et al., 2019).The books and other materials motivate teachers and students and make teaching and learning easier and interesting (Barrick et al., 2014). Analysis on availability of charts/maps, show that 70.83% of teachers affirmed that charts and maps were available and adequate, while 29.66% indicated availability but inadequacy ofcharts/ maps in most secondary schools.

Analysis show that 8.79% of teachers indicated that televisions sets were available and adequate, while 98.7% conformed that television sets were available and inadequate. On projectors and computers, 58.79% of teachers, confirmed their availability and their adequacy, while 41.20% indicated that most schools lacked essential materials for technology (laptops and computers) and innovation and this affected their ability to be more engaged. This included inadequacy of laptops /computers in schools; this is because 99.07% indicated lack and inadequacy of the same resources.

On laboratory reagents and other laboratory materials, 75% of the respondents indicated that despite the availability of laboratory reagents and other related materials were minimal and did not meet the demand, 25% stated that laboratories and laboratory materials therefore not available. This shows that most schools in the county lack adequacy of teaching and learning materials and this affected teachers' ability to work hard and go an extra mile. Instructional and learning resources play a pivotal role with respect to

performance of both the learners and the teacher. The study by Kimosop (2015) recommended the need to ensure adequate teaching aids and instructional resources.

In an open-ended question, teachers were asked to explain how the teaching and learning materials affected their ability to work and go an extra mile. Their responses largely underscored the essence teaching and learning materials in achieving the objectives. The respondents opined that availability, adequacy and reliability of teaching and learning materials engaged teachers in delivering the content an engaged, hence, expending their discretionary work effort. One teacher said, *"I am very motivated to go extra mile once necessary teaching resources are availed to me".* Lack or inadequate teaching and learning materials can affect students' ability to learn adequately and this has ripple effect on teacher's discretionary work effort because teachers feel their input is not supported (Chepsiror, 2020; Kurgatt & Omuna, 2016; Imbahala et al., 2019). It also affects the academic performance of learners as noted by (Jeffery & Van Beuningen, 2019). This proposition was also supported by the two county educational administrators who affirmed that teaching and learning materials were essential on promoting teachers' discretion toward work (Makori & Onderi, 2014). Teachers work better with adequate teaching and learning materials and their lack or their inadequacy usually affect their ability to go an extra mile. Savery (2015) concurred saying that teachers' and students' ability to go beyond the ordinary was dependent on the availability of adequate teaching and learning resources.

The qualitative data from teachers picked a common suggestion from the majority of responses which indicated a need for embracing modern strategies when teaching for

efficiency and effectiveness. Principals defined effective use of teaching/learning materials as the ability to influence students' ability to develop constructive and in-depth knowledge on specific subjects; develop individual learning strategies; and acquire values, attitudes, and generic skills to handle themselves appropriately during the teaching and learning process. The County Director of Education proposed employing appropriate learning tools in the teaching process to establish a firm basis for lifetime learning. Studies such as those of Changwe and Mwanza (2019), Adalikwi and Lorkpilgh (2013) and E-JurnalAkuntansi (2016) have emphasized the aspects of quality teaching and learning materials due to their ability to stimulate teachers and students. This is, because, the resources provide core elements in the process of teaching and learning. These studies further linked quality of instructional and learning resources to the performance of learners.

Teaching materials and resources are intended to supplement teaching and provide a source of learning experiences that are effective enough to elicit interaction between students and teachers during the learning and teaching process (Savery, 2015).Teaching materials have the ability to stimulate both teachers and students in the teaching and learning process, as well as, influencing school outcomes (Aro & Mikkila-Erdmann, 2015). Teachers and principals argued that currently, the education sector demands more than just the availability and adequacy of ordinary teaching and learning resources. They indicated a need for incorporation of technology and innovative measures, which they said would enhance teachers' discretionary work effort.

4.5.2 Principals' responses on physical facilities

Information on the availability and adequacy of physical resources in the school were also sought from the principals. The principals were presented with a list to which they were

required to indicate whether the stated physical resource were available and further comment on adequacy of the same. Table 4.10 shows the results of a summary of their replies.

Table 4.10

Physical Facility Responses from Principals

Availability of physical resources(n=14)	Available and Adequate		Available but inadequate	
	Frequency	%	Frequency	%
Classrooms	14	100	00	00
Furniture	14	100	00	00
Library	11	78.57	3	21.42
School bus	9	64.28	5	35.71
Administration block	4	28.57	10	71.42
Teachers house	5	35.71	9	64.28

All the fourteen principals said that the classrooms and furniture were available and adequate. Other facilities which were described as available and adequate by the majority of principals were library and school bus. The findings indicate availability of priority facilities to the teaching process. The availability of classrooms, furniture and library in most secondary schools in Isiolo County were encouraging.

A study by Imbahalaet al. (2019) noted that most rooms designated as libraries lacked basic facilities including chairs, reading tables and book shelves. Besides, adequate time was not set aside for adequate utilization of library facilities by teachers and students. A library occupies a central position in any school set-up and should be up to date with information materials. A well-equipped library promotes good learning and achievement of higher quality of education. School libraries should be considered ineffective if they have inadequate books and if the students only have limited time to utilize the books in the library (Imbahala et al., 2019).Rwamwenge et al. (2020) for instance, noted that schools with well-equipped library, recorded learners with outstanding academic performance. The results and the observation by other authors are also supported by Mutungi et al. (2014) who underscored the need for policy framework and adequate financing for school libraries. Jamillah (2016) in Tanzania also concurred on the aspects of availability, adequacy and quality of instructional and learning resources and facilities.Tety (2016) warned against focusing on enrolment rather than learning facilities saying that it may lead to students completing the secondary school education without adequate mastery of key life skills.

The Ministry of Education also provides capitation for every school that caters for casual employees and other materials that may be necessary to run the institution. According to the County Director of Education, the Ministry of Education was responsible for national policies and programmes that help to put key facilities in the school to facilitate access to quality and affordable education. The Officer clarified that the ministry ensures that schools have adequate teaching and learning resources, as well, as facilities. The officer also reiterated that the government through Ministry of Education allocates highest budget

on the provision of teaching and learning resources to all schools. He further said that schools in the country were provided with funds for infrastructure materials for practical subjects.

Rwamwenge et al. (2020) noted that teachers who had access to adequate and relevant teaching facilities were more confident, effective and had high discretion, were productive and usually expend more work effort. Similar sentiments were aired by the Director TSC who asserted that relevant instructional materials enabled teachers to be more involving and spend more time with the learners. The TSC Director further said, the government through the TSC supports the schools and the teachers by providing trained human resource and leadership in the implementation of the curriculum. He said that the measures put by TSC are attractive and are expected to influence teachers go extra miles. The TSC Director categorically stated, *"The commission has good salary and remunerations and other benefits that keep their employees motivated".* The director however noted that most teachers were not motivated due to lack of proper procedure for promotion, resulting to poor remuneration and stagnation in one grade for long time, to which he said was affecting the discretionary work effort of teachers and their ability to go an extra mile.

The findings revealed that there were insufficient resources in the schools to run successfully in terms of availability, adequacy, and use of teaching/learning resources in secondary schools in the county. Furthermore, the study observed that teachers were critical factors as far as human resources were concerned. The principals noted that although the Teachers Service Commission was making effort to post enough teachers in schools,

teachers were still demotivated due to excessive work and few resources available in majority of the schools, hence difficulties in meeting their job requirements and going an extra mile.

The study wanted to further validate the availability of teaching/learning facilities and material resources with a view to prove the extent to which they affected the ability to expend discretion work effort. Several statements describing the availability of teaching/learning facilities and material resources at their schools were presented to teachers, and they were asked to indicate the extent to which they agreed with each statement. All six statements given to instructors were on a Likert Scale and were favorable. Table 4.11 summarizes and presents their replies.

Table 4.11

Teachers' Responses on Availability of Teaching and Learning Resources

Statements on availability of teaching/learning facilities and material resources(N= 216)	Disagree		Agree	
	Frequency	%	Frequency	%
(i) Availability of teaching/ learning resources made teachers more engaged	26	12	190	88
(ii) Availability of teaching/ learning resources made teachers engage students in more learning activities	9	4.2	207	95.8
(iii)Availability of teaching/ learning resources motivated teachers go extra miles.	35	16.2	181	83.8
(iv)Availability of teaching/ learning resources made teachers to be innovative in teaching	10	4.6	206	95.4
(v) Availability of teaching/ learning resources enabled teachers to achieve their desired goals	54	25	162	75
(vi)Availability of teaching/ learning resources results to teachers attaining high score in the performance appraisal	11	5.1	205	94.90

The results in Table 4.11 indicate that teachers' agreement was highest on three aspects; that is the availability of teaching/ learning resources made teachers engage students in more learning activities 207(95.8%), availability of teaching/ learning resources made teachers to be innovative in teaching 206 (95.4%), and availability of teaching/ learning

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resources results to teachers attaining high score in the performance appraisal 205 (94.90%). The lowest agreement from responses of teachers was on the statement that availability of teaching/ learning resources enabled teachers to achieve their desired goals, 162 (75%).

According to the two County educational administrators who took part in the interview, learning and teaching resources are no longer limited to textbooks and are available in a variety of formats such as reference books, workbooks, worksheets, web-based learning materials, computer-based learning, structured coursework, and audio-visual teaching aids. Libraries and learning communities are also effective tools in the natural learning environment (Savery, 2015).Specific learning resources have their own credibility in meeting individual learning needs. Most principals in open-ended questions stated that teachers can be motivated by having adequate teaching and learning resources because they could easily deliver the content required. The principals further observed that teaching and learning was ineffective and teachers were largely demotivated in the schools where adequate resources and facilities were provided, and this, limited their ability to put in more effort at work.

Teacher motivation and discretionary productive output were identified as key thematic factors in the teaching and learning process. The information gotten from the interview and open ended questions identified the availability and adequacy of teaching and learning resources and facilities enhanced teachers' ability to expend more work effort. More than half of the principals noted that the schools with adequate teaching and learning resources and facilities such as computers and laptops made teachers to be creative and innovative. The findings are largely in agreement with those of Aro and Mikkila-Erdmann (2015) in

Finland who underscored the issues of instructional resources in determining teachers' commitment and learners' academic performance. Concurrent views were also noted in other studies conducted in Nigeria by (Changwe & Mwanza, 2019; JurnalAkuntansi, 2016). Undoubtedly, when teachers lack resources needed in teaching and learning activities, it limit their effort to spend more time in the classroom. Shakoor and Iqbal (2017), Atieno (2015) and Sogoni (2017) also stressed the importance of backing up teacher proficiency with required teaching and learning information resources. These studies noted that adequate instructional resources enabled skilled teachers stay longer in classes, issue assignments and this helped expend discretionary work effort.

When asked to suggest measures needed, several responses were received from the County educational administrators of Education, TSC County Director, principals and teachers. The same were analyzed thematically and came up with few categories which included need to motivate teachers, re-addressing the reward systems for teachers, provision of sufficient learning and teaching resources, and championing collaboration with all stakeholders. These suggestions indicated that the discretional work effort of teachers do not just require adequate teaching and learning resources and facilities only but, also require institutional support systems.

The study wanted to further validate the availability of teaching/learning facilities and material resources with a view to prove the extent to which they affected the ability to expend discretion work effort. Several statements regarding the availability of teaching/learning facilities and material resources at their schools were posed to teachers,

and they were asked to indicate the extent to which they agreed with each statement. The six statements given to teachers were all on a Likert Scale and were all positive. Table 4.11 summarizes and presents their responses.

4.6 Response on principals' leadership styles

The second objective aimed at determining how principal's leadership characteristics influenced teachers' discretionary work effort in government secondary schools in Isiolo County. This construct was measured as a compound variable (latent variable) where various sentiments on aspects of principal's leadership characteristics were posed to teachers respondents. All the thirty seven (37) sentiments provided to teachers were in Likert Scale and positively stated. Their responses were summarized where; the use of median helped to come up with two categories of responses as presented in Table 4.12.

Table 4.12

Descriptive statistics regarding principals' leadership characteristics

Statements on Leadership Characteristics (N= 216)	Disagree		Agree	
	Frequency	%	Frequency	%
1. Inspiring, motivating, and encouraging teachers to invest more effort in their tasks and commitment	8	3.7	208	96.3
2. Emphasizing work ethic, ethical behaviour and integrity in teaching	8	3.7	208	96.3
3. Making teachers feel trusted with decisions or important tasks/activities	10	4.6	206	95.4
4. Providing security for teachers from hazardous school environment	11	5.1	205	94.9
5. Mentoring, coaching and guiding teachers in performance of duties	12	5.6	204	94.4
6. Teachers following and always adhering to hierarchy and the corporate structure, and culture in the school	13	6	203	94
7. Providing teachers with the tools, facilities, and equipment they need to do their work	14	6.5	202	93.5
8. Making teachers responsible for their own actions	18	8.3	198	91.7
9. Rewarding teachers when they do well	19	8.8	197	91.2
10. Affording flexibility on how teachers operate to achieve better results	20	9.3	196	90.7
11. Teachers following standards, expectations and targets achievement	22	10.2	194	89.8
12. Treating teachers with respect	26	12	190	88

13. Providing enough teaching and learning materials	30	13.9	186	86.1
14. Providing teachers with sufficient guidance on achievement of teaching goals	30	13.9	186	86.1
15. Celebrating good results with teachers	36	16.7	180	83.3
16. Supporting and collaborating with teachers as they try new approaches and develop innovative ways of dealing with teaching and achievement issues in the school	37	17.1	179	82.9
17. Making self-decision about the school	39	18.1	177	81.9
18. Allowing input from teachers in decision making	40	18.5	176	81.5
19. Supervising teachers' progress of routine work	46	21.3	170	78.7
20. Delegating the power to teachers that allow them to solve problems on their own	49	22.7	167	77.3
21. Listening to teachers and sharing their feelings by guiding and counselling them	56	25.9	160	74.1
22. Allowing teachers to be innovative and discovering new ideas in their subjects	57	26.4	159	73.6
23. Allowing teachers to work with minimum supervision	60	27.8	156	72.2
24. Establishing and communicating clear rules and regulations to be followed by teachers	70	32.8	146	67.6
25. Following of strict directives or instructions given to teachers	80	37	136	62.9
26. Communicating solutions to teachers explicitly and concisely for a shared vision of success	85	39.4	131	60.6
27. Providing funding for educational tours and exactions.	135	62.5	81	37.5
28. Identify with superiors, and emulating them in teaching	145	67.1	71	32.9
29. Rewarding teachers for behaving in an expected	171	79.2	45	20.8

manner, and punish for any deviation.				
30. Allowing teachers to make their own decisions on how to teach				
	180	83.3	36	16.7
31. According teachers the time they need to accomplish their work				
	181	8.38	35	16.2
32. School leadership taking responsibility for the group's decisions and actions.				
	184	85.2	32	14.8
33. Providing finance for extra-class activities	186	86.1	30	13.9
34. Condoning and understanding mistakes made by teachers				
	191	88.4	25	11.6
35. Being present, giving praise when things go well, taking responsibility when things go wrong, and providing constructive criticism to teachers				
	11	5.1	25	11.6
36. Trusting that teachers can deliver good results with minimal supervision				
	192	88.9	24	11.1
37. Listening and showing concerns and attention to problems happening outside the teachers' performance				
	201	93.1	15	6.9

The findings in Table 4.12 clearlyshow the significant role played by the principals' leadership characteristics in motivating teachers' discretionary work effort. The study observed an overwhelming agreement level on most of principals' leadership practices. According to secondary school teachers, they would expend more discretionary work effort when principals are inspiring, mentoring, coaching, listening, upholding work ethics, make teachers feel trusted, provide secure environment, provide teachers with the tools, facilities, and equipment they need to do their work; make teachers responsible, provide reward system, foster flexibility, standardization, ensure good communication systems, are

respectful to teachers, involve teachers in decision making, and delegate duties to teachers, are supportive and collaborative.

The schools reward system for teachers is one of the elements that stir up discretionary work effort. When asked to state the importance of rewarding teachers when they do well and whether it influenced their discretionary work effort, majority of the teachers answered in affirmative.

This implies that reward system is a significant motivator for teachers work effort. Most teachers said that they expected the reward system to be continuous and not applied haphazardly. The comment from the County TSC Director on the reward system indicated that the commission was developing a system of focusing more on teachers who perform well and empowering them to do more instead of focusing on those who fail to perform. This was envisaged to enhance teachers' discretionary work effort at the work place. According to the County TSC Director, the teachers' employer provides good remuneration package that should motivate teachers to go an extra mile in the job. Kainga (2021), Gatere (2015), Sogoni (2017), Okello (2017) and Mintrop and Ordenes (2017) highlighted the potential implications of investing in teacher reward systems in improving their dedication towards work. Their recommendations envisaged that the TSC ought to invest heavily in this through collaboration efforts with secondary school overseers in order to arrive at this crucial aspect of achieving employee commitment and loyalty. Moreover, the findings affirmed that the study adopted Maslow's hierarchy of needs theory (1943) that individual behaviour could be triggered by different factors (reward and motivational systems) in improving expending discretionary work effort among secondary school teachers.

This issue of respect featured promptly from the teachers. Respect validates what we are and where we want to be. Respecting employees implied that the principal dutifully knew teachers, both professionally and personally. On the importance of respect to teachers' discretionary work effort, most teachers, 190 (88%) agreed that leadership that values employees' input, encouraged teachers to expend more discretionary work effort. Several comments were noted from teachers which seemed to emphasize on the need for principals to know teachers well and understand their strength and weaknesses. Both the CDE and the TSC Director concurred and urged principals to embark and practice a leadership style that cause employees to be more engaged. The CDE highlighted the need for principals to be trained on leadership principles and managerial characteristics so that they could exercise good leadership practices for improved discretionary work effort. This crucial role was also evident in the opinion of Abdullah (2019), Sogoni (2017), Kainga (2021), Forson et al. (2021), Karanja (2016) and Muga (2019) who reiterated that the principals leadership style, friendliness, consultative nature, teacher involvement and humanitarian perspectives possessed a high influential threshold in impacting teachers ability to work extra hard in showing other discretionary work efforts in the school environment.

The results in Table 4.12have indicated need for principals involving teachers in decision making and their soliciting ideas regarding the school development, teaching and learning processes. By doing so, the teachers usually trusted their leaders and are therefore motivated to expend more work effort. The TSC Director said that a simple statement like, *"what are your thoughts or contributions on how we could solve this---?"* was more than enough and a source of motivation to employees. The CDE underscored the need for

principals to build a culture of sharing information and need to devise mechanisms for encouraging creativity. Colleman (2006) argued that leaders (principals) should be accountable, trustworthy, empathetic, connected and responsible for their daily activities in order to make teachers feel trusted and appreciated. The findings were consistent with Kainga (2021), Mugo (2019), Migwi (2018) and Avci (2016) who observed that reward management systems such as fair inclusion of teachers ideas, involvement in decision-making, participation in meetings and avalanche of room to speak their mind pertaining work related issues, opened a great avenue for job satisfaction which promoted teachers to work extra hard. Findings are in support with the adopted theory addressing the place of good principal leadership style in enhancing teacher's motivation(Maslow, 1948)through a unique path for self-motivation, growth and personal development through involvement and creation of a sense of both worth and trustworthiness.

Providing tools, facilities, and equipment for teachers to do their work stood out as a critical element that trigger teachers discretionary work effort. The respondents were of the opinion that provision of tools was a leader's responsibility to enhance teacher's ability to deliver the content to the students. Teachers further said that principals should be able to provide adequate tools and finances for extra-class activities as a source of motivation to both teachers and students. However, principals reiterated that such activities cannot be termed as motivators of discretionary work effort. This noble role of principals was also clearly articulated in the discussions provided by Migwi (2018), Avci (2016), Mugo (2019) and Sebastian et al. (2016) that school principals were obliged to provide required financials, fiscal, material and informational resources for enabling achieve work flow and effectiveness in the school environment.

Most of the respondents agreed that delegating power to teachers to handle students' related problems would enhance their discretionary work effort. Notably, when duties are shared, they become less cumbersome, more effective and create time for managers or principals to handle other demanding matters. Despite this, some principals disagreed saying that when teachers are provided with authority to solve problems, the principal loses power and many have problem managing the institutional affairs. They opined that the principal was responsible for all institutional activities including problem solving and was accountable for any eventualities. They felt that teachers should be delegated duties to handle issues that are not related to institutional discipline and outcomes especially diligence in performance. Nevertheless, the CDE agreed that delegating duties to other employees is the best option of leadership and management. Delegating powers of the principal to other teachers so as he/she engages in more challenging jobs, was recommended in Migwi (2019) and Avci (2016) who found that as teachers were given more opportunities to participate in decision-making, they were increasingly motivated in their jobs, hence they gave their best at work. Migwi and Avci findings did not feature the negative implications of principals handing administrative powers to teaching staff.

The relevance of the Abraham Maslow's hierarchy of needs model (1948) can easily be integrated in explaining safety and security as pointed out by teachers. The teachers (94.9%) linked it to discretional work effort. This implies that employees want to know that they are safe from outside threats and persons who may get entry to the school with the intent of causing danger. Safety has psychological effects as well. Employees who are psychologically safe may express themselves, share their observations, and make ideas

without fear of retribution. Both the CDE and TSC Directors admitted that no meaningful learning can take place if teachers' security was not addressed. The CDE emphasized the need for a secure and peaceful environment for teachers saying that it would promote teachers' discretion work effort and make them extra engaged. The principals also concurred with the statement that insecure situations inhibit teachers' ability to expend more work effort. Principals further asserted that insecurity demoralized school activities and hindered teachers' ability to go an extra mile due to fear and threats. For discretionary work effort to flourish, the County TSC Director stated that schools should provide safe learning environments both outside and inside the school in order to enhance the teachers' ability to expend discretionary work effort. Related reactions were echoed in the findings of (Gatere, 2015; Adil & Fatima, 2013; Basar et al., 2021; Wambui, 2017).

This study noted that building a strong relationship with teachers was making them innovative and engaged. Both teachers and principals agreed on the need for harmonious working relationship with their teachers and other employees within the school. Responses got from most principals in an open-ended question indicated how majority of them preferred working with teachers who are reliable and honest. When contacted for comments on the same, The County TSC Director asserted that the principal should set targets and support teachers to implement them successfully. He supported the need for cordial relationships and conducive environment saying that it was significant in enhancing teachers 'ability to expend more work effort. Findings agreed with the reports presented by Sogoni (2017), Basar et al. (2021) and Ada and Mkpa (2020) who established that good reward management activities motivated staff in the school and this had impact on their job

security and turnover. Strong working relationships among the subordinate and the superiors' boost their morale which made the turnover antecedents get ironed out through friendly discussions.

Teachers were asked to state ways they were involved in planning and development in their school and how it affected their discretion. The data revealed that teachers were involved in school decision making, planning, and budgeting. The findings indicated that principals worked with Board of Management (BoM) to implement school development policies and only informed teachers about the progress. Nearly half of the principals argued that this had no effect on teachers' discretion and did not inhibit them from going an extra mile. Teachers on their part contented that some activities undertaken in the school were not priorities as far as the teaching and learning opportunities were concerned. They argued that this affected them and inhibited their discretionary work effort considering that some priority items were not availed. Teachers argued that involving them in planning and development was significant in creating a sense of ownership, hence, fostered discretionary work effort.

On whether principal's leadership characteristics inhibited or enhanced teachers ability to expend more work effort, one teacher had the following to say, *" If the principal adapts a dictatorship kind of leadership then the teachers have no option but to follow the principal's idea regardless of their effectiveness, but if the principal incorporates the ideas of the teachers, it motivates their discretion"* another teacher respondent said*, " Either by motivation or demotivating it is the leadership that matters in any progress. No school can have effective and motivated, teachers willing to give more if the principal does not demonstrate support and willingness".* These excerpts, together with other views, show that expending of work effort by teachers required supportive and accommodative leadership from

principals. Basar et al. (2021) and Kean et al. (2017) also noted that a transformational principal could easily hear the voices of all teachers, could learn from them, could involve them in decision making and this humanitarian sense create souse of belongingness, job security, erase turn-over antecedents and assures staff satisfaction. Findings confirm of the study' adopted theory by (Maslow, 1948).

Concerning the leadership aspects that are needed to be enhanced to help teachers expend more time and energy at work, most teachers mentioned trust and honesty. They also mentioned the nature of the leadership style practiced by principals. While commenting on leadership practices, the two directors indicated that most principals practiced laiz-ez fare type of leadership. However, the County Director of Education lamented that, "*Some principals are never at school. They are here and there doing nothing in town while teachers struggle to make schools effective*". The TSC Director further said, *"Some principals have no interest on the school and practice autocratic leadership to maintain teachers at work, others don't respect their teachers, causing them stress at work"*. This information suggests that TSC and the Ministry of Education should intervene to guarantee the adoption of proper leadership practices in secondary schools, given the tremendous influence on the amount to which instructors accelerate additional work efforts. In contrast were the findings of Avci (2016) and Ada and Mpka(2020) who found that majorly, high school principals practiced transactional, situational and transformational leadership styles which accommodated the voice and needs of teachers. These aspects were deemed to bear effective results on the teacher retention, satisfaction, and motivation, low staff turn-over and high discretionary work effort.

The respondents were also asked to identify the leadership characteristics that needed to be changed in schools to enable teachers expend more work effort at work place. The teacher respondents emphasized on the need for principals to embrace current leadership strategies and style that is people-oriented to allow employees to be participants in decision making and share in the success and failure of the school. Other measures that featured in their responses included creating a conducive environment for teaching and learning purposes, offering guidance and moral support to all teachers and students, as well as, providing support teaching materials which were termed as essential in enhancing teachers' motivation to be more engaged, hence expending of extra work effort. Findings were also universally agreed in the reiterations aired out by Kainga (2021), Gatere (2015), Avci (2016), Sogoni (2017) and Ada and Mpka (2020)that working conditions, monetary and other forms of remunerations and adequacy of working resources emerged from the availability of transformational leadership personnel in the first place. The presence of school heads in possession of quality leadership skills remained an outstanding virtue that could accommodate all the other teacher motivational aspects for teachers to expend more work effort in their working areas. Principals with participative and consultative nature were found to highly value employees that this aspect made teachers expend more time and energy at work.

Employee motivation is a critical leadership duty. It aids in the conversion of an employee's knowledge, skills, and talents into real work behavior and ability to do the job. This was well outlined in the inferences of Sougui1 et al. (2016), Onjoro et al. (2015), Franklin (2016)and Emod (2018) that motivation through involvement in decision-making, allocation of administrative roles and listening of teachers views provided an avenue for them to gain

leadership skills and bear the school mission, hence, development of innovative ways of achieving the school mission. This translated to better job performance and development of skills and abilities. While motivation enables employees to carry out their jobs as required, the study analysis showed that the level of motivation is dependent on the extent to which leadership is able to exert power and authority to motivate employees to go an extra mile. Work motivation originates work-related behavior and defines its direction, intensity, and length. Leadership attributes further determine the amount of involvement and effort people really put into their professions.

Findings were in agreement with the observations bySougui1 et al. (2016), Onjoro et al. (2015), Franklin (2016) and Emod (2018).Many leaders nowadays aim to empower their people by distributing responsibility and decision-making, sharing information, and obtaining their opinions. According to research findings, this style of leadership works best in inspiring specific types of employees' performance qualities and promotes a mixed type of leadership style that meets the scenario on the ground for the organization's efficacy and efficiency.

4.6 Descriptive results on teacher's work characteristics

The teachers' work characteristics were examined in objective three to determine the extent to which it influenced the teachers' discretionary work effort in government secondary schools in Isiolo County. The variable was measured as a composite variable (latent variable) where various sentiments on aspects of teachers' leadership characteristics were posed to teacher respondents. All the seven (7) sentiments provided to teachers were in

Likert scale and positively stated. Their responses were summarized where the use of median helped to come up with two categories of responses as presented in Table 4.13.

Table 4.13

Descriptive Statistics on Teachers Work Characteristics

	Disagree		Agree	
	Frequency	%	Frequency	%
Statements on Leadership Characteristics (N= 216)				
1. Ability to learn from other teachers	11	51	205	94.9
2. Ability to apply different strategies in the classroom	25	11.6	191	88.4
3. Ability to apply pedagogy skills in handling different subjects	29	13.4	187	86.6
4. Having a clear understanding and mastery of the teaching subjects	34	15.7	182	84.3
5. Teachers being engaged and committed	34	15.7	182	84.3
6. Being able to cope with other teachers	37	17.1	179	82.9
7. Being optimistic when pursuing new approaches	61	28.2	155	71.8

According to the results discussed in Table 4.13, teachers reported high agreement level on all the seven sentiments about the teachers' characteristics which affect their ability to expend discretionary work effort. The highest agreement level was 'ability to learn from other teachers' at 94.9% while the lowest was 'being optimistic when pursuing new approaches' at (71.8%). All the sentiments gave an overall agreement of (84.7%), which

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was high. This meant that the ability to learn from others, apply different strategies in the classroom, apply pedagogy skills in handling different subjects, having a clear understanding and mastery of the teaching subjects, being engaged and committed, being able to cope with other teachers, and being optimistic when pursuing new approaches, all played a very significant role in influencing teachers to expend discretionary work effort. Findings agreed with those of Mugizi et al. (2015), Blackman (2018) and Tentama and Pranungsari (2016) which inferred that teachers self-efficacy, high teaching proficiency, motivation and involvement in leadership engagements increased teacher commitment and discretionary at work. The findings also show that (82.9%) indicated that ability to cope with others influenced teachers' ability to expend discretionary work effort. However, Mugizi and Blackman were silent on the influence of ability to cope with others influenced employees to expend discretionary work effort.

Understanding the subject content, the findings were that teachers work characteristics were affected if the teacher lacked clear understanding of the subject to be taught. Principals' opinion on mastery of subjects indicated that lack of clear pedagogies in handling subjects was a hindrance to teachers expending extra work effort. The study also indicated that lack of co-operation from co-workers specifically affected individual teachers' discretionary work effort and delineated student's involvements in teaching and learning activities. Teachers who were exposed to different methods of handling classroom activities (886.6%) were found to be competent and spend more time with the students discovering new ideas and new contents. The respondents 84.3% agreed that (Shakoor & Iqbal, 2017; Atieno, 2015; Sogoni, 2017).Other factor that influenced teachers' ability to expend extra work effort was lack of cooperation from other workers specifically affected individual discretionary work effort. In

an open-ended question, teachers also agreed that parental involvement in school activities could affect teachers work effort either negatively or positively.

The responses from teachers indicated that the parents who are active in supporting teachers implement the curriculum influence the teachers' work effort and made them motivated, while the parents who criticize the school and got involved in activities that stress teachers' effort, usually influenced teachers' effort negatively and hence, the teachers became demotivated to go an extra mile. The importance of involving parents in school activities was also evident in the reiterations of (Durisic & Bunijevac, 2017; Nwechurch, 2017; Ramanlingam & Maniam, 2020). However, findings did not agree that parental involvement did not qualify to be a school-factor and hence lacked significant relationship with influencing teacher work efforts other than student academic performance.

The foregoing findings are supported by Abraham Maslow's basic needs theory which argues that apart from the hierarchical basic needs individuals need compassion, friendship, recognition of achievements, appreciation and being respected in order to function normally (Thoonen et al., 2011). The findings affirmed that the school' level of working conditions, and the level of cooperation and collaboration were required to motivate teachers to expend their work effort. There were countless more job-related behaviors that genuinely belonged under the tent of teachers' discretionary work effort and circumstances that stimulate their ability to invest extra work effort. Billingsley et al. (2020), Kuncoro and Dardiri (2017), Ni (2017) and Addimando (2017) also noted the connection between conducive working conditions and teacher commitment. Good and favorable working conditions provided to teachers were viewed as a motivation aspect that led to more teacher commitment, availability and discretion of work efforts at the school.

Commenting on teachers' work characteristics, the County TSC Director said that some teachers were not committed to their work and usually go to school late, drunk and others did not prepare well for teaching. These make them ineffective and affect their discretionary work effort. These indicated retrogressive elements and characteristics which teachers should avoid since they inhibit individual ability to expend more work effort. Findings concur with the stress aired out by Ni (2017), Kuncoro and Dardiri (2017) and Billingsley et al. (2020) who noted that strong teacher commitment at work out rightly solved lateness, ineffectiveness and laziness challenges principals frequently experienced while handling teaching staff. These authors were, however, silent on the aspects of teacher expending more working efforts.

Information gathered from principals and the two directors narrowed down on a few internal and external teachers work characteristics elements. The internal elements in the school were identified as managerial influence on teacher's ability to expend work efforts, and influence from other teachers and students. The external elements were identified as parents, pressure groups, and centralized management. Outstanding clear features relating to principals leadership influence and resources on teacher ability to expend more energy at work were clear in the reiterations of (Mugizi et al., 2015; Blackman, 2018; Tentama &Pranungsari, 2016). Studies were silent on other internal and external work characteristics. However, the study indicated that employee work characteristics is influenced by different school factors, hence, more studies are required to identify the influence of different factors on employees discretionary work effort.

4.5.4 Descriptive results on school culture

The fourth goal of this study was to analyze the impact of school culture on teachers' discretionary work effort in Isiolo County public secondary schools. The school culture was measured as a composite variable (latent variable) where various sentiments on aspects of school culture were posed to teacher respondents. All the sixteen (16) sentiments provided to teachers were in Likert scale and were positively stated. Their responses were summarized where; median was applied to come up with two categories of responses as presented in Table 4.14.

Table 4.14

Descriptive statistics on school culture

Statements on aspects of school culture (N= 216)	Low		High	
	Frequency	%	Frequency	%
i Co-operating with other stakeholders such as, parents and other members of the community	4	1.9	212	98.1
ii Respecting time as a school resource	6	2.8	210	97.2
iii Using school resources to reward teachers	13	6	203	94
iv Culture of trust and respect to all	15	6.9	201	93.1
v Co-teaching with colleagues	15	6.9	201	93.1
vi Allowing no deviation to school practices and procedures	19	8.8	197	91.2
vii Clear guidelines on how to reward innovative ideas	22	10.2	194	89.8
viii Culture of adhering to belief systems in the school	22	10.2	194	89.8
ix Guidelines on dressing in the school	24	11.1	192	86.9

x	Emphasis on school's values and ethos	40	18.5	176	81.5
xi	Strict following of school rules, regulations and policies	142	65.7	74	34.3
xii	Leaders ability to appreciate work effort expended	165	76.4	51	23.6
xiii	Having a school policy on how to motivate teachers	165	76.4	51	23.6
xiv	Ceremonies to reward best achievers (students)	171	79.2	45	20.8
xv	Receiving different rewards for similar work done	196	90.7	20	9.3
xvi	Obeying leaders authority without questioning regardless of the consequences	202	9.35	14	6.5

Out of the sixteen school cultural-related sentiments, the study identified ten (10) aspects that were positively affecting the teachers' ability to expend discretionary work effort. These were the issues of co-operation of stakeholders, respect for time, rewards for teachers, the trust and respect for all, the co-teaching practice, adherence to procedures, practice of rewarding innovative ideas, adherence to school belief systems, dressing code, and adherence to the school's values and ethos. All these ten aspects had an agreement level between 81.5% and 98.1%. Among the aspects that were not eliciting teacher' ability to expend discretionary work effort were strict following of school rules, regulations and policies; receiving different rewards for similar work done, and the act of obeying leaders authority without questioning. Culture guides and promotes all school activities including teachers discretionary work effort. If the culture of the school is positive towards teaching and learning, it pushes the teachers to work maximally for the benefit of the school.

The study observations were that majority of the teachers agreed that ceremonies to reward teachers' discretionary work effort did not motivate teachers to expend more work effort. This implied that teachers preferred the appreciation of an individual in a personalized manner as opposed to appreciation done at a ceremony. Teachers further indicated that respect and trust kept them focused and motivated to do more. Moreover, the idea of co-teaching with colleagues enabled teachers to build individual confidence and ability to expend more work effort. Majority of principals noted that co-teaching was a new strategy and that most schools were practicing it and that improvement had been noticed in schools that had embraced it. Co-teaching involve teachers teaming up in planning, instructing and in assessing same group of learners in a common classroom where each teacher in the team focuses on particular skills and strength in teaching and coaching learners (Amanda, 2022). However, some principals argued that co-teaching dragged individual progress. Studies such as Mofield (2020) and Gates (2018) also presented mixed reactions to co-teaching saying that it possesses both merits and demerits to the schools adopting it. The advantages ranged from growth in teacher competency to growth in student learning; while, the disadvantages included laziness, time constraints and conflicts among teachers.

Every organization has its specific culture that determines the school's operation. All respondents generally agreed (Table 4.14) that there is need for the management to nurture a school culture that is motivating. This concurs with those found by Suntaniet al. (2021), Yyler (2016) and Duta et al. (2014) where interpersonal, decision-making and informational roles of principals were found to give teachers clear direction on what is to be achieved by each teacher; hence, this were noted to have motivated them to expend working efforts to

meet work targets. The study therefore deduced that a culture where clear communication procedures are available to employees has capacity to motivate them to be more engaged and to expend discretionary work effort; hence, clear communication was directly related to teacher motivation(Duta et al., 2014).The foregoing findings are supported by Abraham Maslow's basic needs theory (1948) which, argue that apart from the hierarchical basic needs, individual need, clear communication, compassion, friendship, recognition of achievements, and appreciation as motivation aspects for better job performance.

School rules and regulations are part of the culture that employees were expected to respect, however, the responses indicated that observing school rules, regulations and policies as part of the work requirements hardly motivated any teacher to do more. Comments receivedfrom teachers indicated that, for teachers to be motivated, the principal should involve them in making and developing school rules, regulations and policies. The County Director of Education noted the great need to involve teachers when developing school rules and regulations. The Director further underscored the importance of treating teachers as key stakeholders in a learning institution; hence, their role in the development of school rules and regulations cannot be underestimated.

This is consistent with the ideas of Perpetua (2019), Mwingi (2017), Labanauskis and Ginevicius (2017) and Degtjarjova et al. (2018) who noted that stakeholder involvement ensured effective teaching and learning, successful strategic planning and better decision-making. He emphasized on the need for mutual relationship between teachers and external stakeholders. The results point out that the need for principals to evaluate the effect of school

culture on teachers' motivation. They are expected to instill a culture that nurtures employees to be more focused on school outcomes and foster sense of responsibilities. The TSC Director stated that principals have the authority to create a school culture that motivates and encourages teachers to work hard. The principals opined that changing school value system, rules and practices require substantial amount of time. However, they noted that these changes are many times thwarted when the principal is transferred before a given culture is modified. Similar observations were reported by Car and İpe (2019), Hernita et al. (2020), Orindah (2014), Al-Amin (2018) and Amtu et al. (2020) who noted that positive school culture that comprised of reward systems, enforcement of school rules, adherence to school vision and school mission statements, peer counseling, involving teachers in decision-making and organizational commitments were key ingredients in a school culture that positively influenced teachers discretionary work effort for organization effectiveness. The foregoing are supported by Abraham Maslow's basic needs theory of 1948which argues that apart from the hierarchical basic needs, good school culture that recognizes and appreciates teachers' achievements, influences them to instill high commitment at work.

4.9 Descriptive results on Teachers' Discretionary Work Effort

The dependent variable in this study was teachers' discretionary work effort. The variable was measured as a composite variable (latent variable) where various sentiments on aspects of school culture, the school customs and beliefs stems were posed to teacher respondents. All the eight (8) sentiments provided to teachers were in Likert scale and were positively stated. The aspects measured in the eight sentiments were about the nature of leadership, the manner in which teachers are handled in the school, availability of teaching/learning facilities and material resources, equipment, internal processes, communication and governance; and

teachers' characteristics. Their responses were summarized where; median was applied to come up with two categories of responses as presented in Table 4.15.

Table 4.15

Descriptive Statistics on Teachers' Discretionary Work Effort

Statements on teachers' discretionary work effort	Disagree		Agree	
	Frequency	%	Frequency	%
i. Nature of leadership in the school makes teachers to be more engaged and put extra effort in teaching	9	4.2	207	95.8
ii. How teachers are handled by school's leadership determine their ability to put extra effort in teaching	11	5.1	205	94.9
iii. Availability of teaching/ learning facilities and material resources makes teachers to be more engaged and put extra effort in teaching	15	6.9	201	93.1
iv. Functionality, proficiency in applying and using tools and equipment affect teacher's ability to put extra effort in teaching	18	8.3	198	91.7
v. Internal processes, communication and governance	18	8.3	198	91.7
vi. Teachers' attitude and conduct and behaviour in the school affect their ability to put extra effort in teaching	39	18.1	177	81.9
vii. Teachers' characteristics and demeanour in the school affect their ability to put extra effort in teaching	41	19	175	81
viii. The customs, beliefs systems, procedures, values and ethos practiced in the school affect their ability of a teacher to put extra effort in teaching	85	39.4	131	60.6

Table 4.15 demonstrates that all of the indicators on teachers' discretionary work effort received a high degree of agreement from teachers. The highest agreement level was the

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nature of leadership at 95.8%, while the lowest was the school customs and beliefs systems at 60.6%. This resulted to an overall agreement level of 86.3%. This confirmed that the nature of leadership, the manner in which teachers are handled in the school, availability of teaching/ learning facilities and material resources, functionality of tools and equipment, internal processes, communication and governance; teachers' attitude, teachers' characteristics and demeanor, and the school customs and beliefs systems were significant indicators of teachers' discretionary work effort. This meant that the above aspect characterizes and influence the extent to which teachers expend discretionary work effort, hence, should be emphasized at the workplace. Findings on teacher motivation, principals' leadership characteristics, teaching materials availability, communication and good school culture were consistent with the inferences made by (Sogoni, 2017; Adil & Fatima, 2013; Gatere, 2015; Mintrop & Ordenes, 2017; Migwi, 2018; Ni, 2017; Kuncoro & Dardiri, 2017) studies. These inferences were well compared with the adopted theory by Abraham Maslow (1948).

Principals were not opposed to the above mentioned aspects but expressed difficulties which they were facing regarding the shortage of staff and limited resources. They also cited lack of cooperation from some teachers. The County TSC Director, however, complained that some principals have introduced systems where teachers teach extra hours to which they are compensated by parents. Both the County TSC Director and County Director of Education argued that the arrangement is against the government policy. They however, noted that the Ministry is not opposed to expending extra hours to cover the syllabus but it is at the discretion of the school principal. The County TSC Director said that the government recognizes the stress students went through during the day and wish they

could just be taught during the normal time provided. He categorically said that TSC does not support working overtime for a pay. He insisted that, *"teachers must first meet job requirements by attending all lessons first before remedial work".* Findings disagreed with the situation in Zambia (Musongole & Chipindi, 2021; Musongole, 2019) where it was reported that remedial and part time classes were conducted with the backup of clear government and school policies.

When asked for solutions on what the teacher employer should do to enable teacher expend more work effort, several suggestions were provided by teachers, principals, County TSC Director and County Director of Education all of which were narrowing down to employment of more teachers, good leadership practices, learning and conducive working environment; provision of adequate teaching and learning resources, sustainable reward systems, implementation of promotion policy, and adequate infrastructure, equipment and facilities required by teachers and students. Similar suggestions were recommended by (Sogoni, 2017; Kuncoro & Dardiri, 2017; Migwi, 2018; Ni, 2017). The reason accrued to such suggestion was that the presence of motivated teachers, availability of most teaching/teaching resources and supportive principal's leadership style influenced employee's discretionary work efforts and hence good organizational outcome.

The solutions provided in the above discussion indicated a need for concerted effort towards an enhanced teachers' discretionary work effort. For example, the suggestions point out a need for recruitment and promotion policy by Teachers' Service Commission. This has further implications on budgetary allocation by the government. The findings

highlight the importance of the Ministry of Education ensuring timely availability of suitable teaching and learning materials, as well as adequate facilities and equipment in secondary schools. Suggested recommendations from closely related studies mirrored the aspect of working conditions enablement, training and leadership development for principles, teacher in-service trainings for efficient proficiency through recommending the Ministry of Education for interventions (Sogoni, 2017; Ni, 2017; Kuncoro & Dardiri, 2017; Migwi, 2018). However, Sogoni,Ni Kuncoro & Dardiri and Migwi recommendations were silent on implicating privatization of teacher's working policies.

4.7 Diagnostic Tests

The study's main goal was to examine the association between school environmental characteristics and teachers' discretionary work effort in public secondary schools in Isiolo County, Kenya. The descriptive and qualitative information presented in the preceding sections provides critical information regarding the variables of the study. In realizing the aforementioned purpose, the study carried out inferential analysis and diagnostic tests were therefore conducted to help determine the appropriate inferential statistical analysis (parametric or non-parametric tests) suitable for this study, a diagnostics on normality and linearity was conducted.

The normality test was the first condition to be checked. Most studies assume that research data is collected from a population whose variables are normally distributed, hence, the need for normality test to check fulfillment of the normal distribution condition. The normality of the data regarding the main variables of the study was determined statistically

using the Shapiro-Wilk. Table 4.16 displays the findings of the P-values based on the Shapiro-Wilk tests.

Table 4.16

Tests of Normality on main Variables of the Study

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
X_1	.536	216	.001	.297	216	.000
X_2	.485	216	.005	.504	216	.003
X_3	.509	216	.000	.437	216	.000
X_4	.498	216	.007	.473	216	.002
Y	.535	216	.000	.308	216	.010

a. Lilliefors Significance Correction

According to the results in Table 4.16, it is clear that the P-value (Shapiro-Wilk) for each study variable is significant, (Y=.010; X1 = .000; X2 = .003; X3 =. 000; and X4 =. 002; $P< 0.05$).This indicates that the data was not spread normally. The graphical methods were also applied to further confirm the non-normal condition, especially for the dependent variable. Figures 4.1 and 4.2 show the results, respectively

Figure 4.1

Regression Standardized Residual.

Dependent Variable: Y

Mean = -1.19E-15
Std. Dev. = 0.991
N = 216
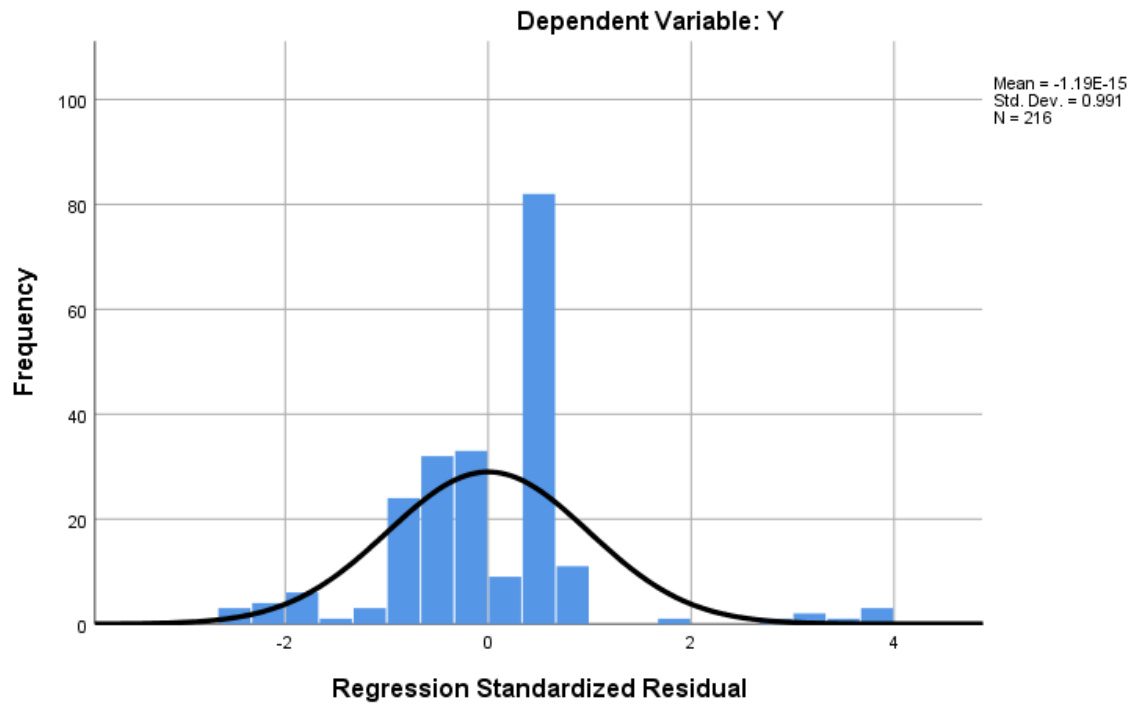
Figure 4.1 shows skewness of the data to the left, hence normal distribution status is somewhat violated. The same is demonstrated using the standard Q-Q plots as shown in Figure 4.2

Figure 4.2:

Q-Q showing normality of data on the teachers' discretionary work effort

Normal Q-Q Plot of Y
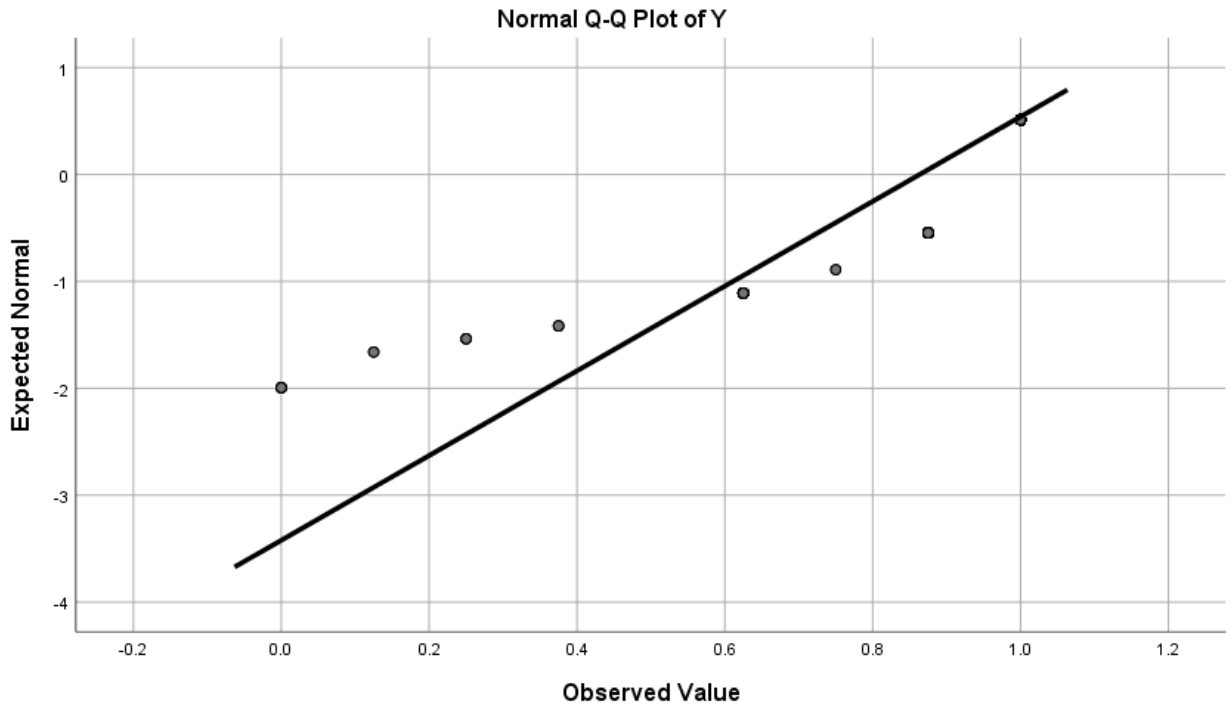
The Q-Q figure in Figure 4.2 demonstrates that most data points are distantly fitted along the best fit line, and so vary considerably from it. This does not only violate the normal distribution condition but also lacks linearity dependency. The non-linearity in this context means that the independent variables (the school factors) do not have a straight-line relationship with the outcome variable (the teachers' discretionary work effort). The test on the multi-co-linearity problem revealed that Variance Inflation Factor (VIF) was above 10. The multi-co-linearity among explanatory variables is regarded as a serious drawback to multiple linear regressions (Waithima, 2020). According to Akinwande et al.

(2015), a VIF that goes above 10 shows that the regression coefficients are poorly estimated due to multicollinearity.

The diagnostic tests conducted supported the adoption of non-parametric inferential statistics in testing the hypothesis of this study. In that connection, a Spearman rho correlation and binary logistic regression were adopted in this study to test the hypothesis.

4.8 Hypothesis Testing

To test the hypothesized relationship between the school environmental factors and teachers' discretionary work effort, a bivariate Spearman's rho correlation analysis was conducted and results presented in Table 4.17. The significance level was tested at 0.05 in each case.

Table 4.17

Correlations analysis on dependent and independent variables

Spearman's rho		X1	X2	X3	X4	Y
X_1	Correlation Coefficient	1.000				
	Sig. (2-tailed)	.				
	N	216				
X_2	Correlation Coefficient	.562**				
	Sig. (2-tailed)	.000				
	N	216				
X_3	Correlation Coefficient	.676**	.831**			
	Sig. (2-tailed)	.000	.000			
	N	216	216			
X_4	Correlation Coefficient	.613**	.916**	.907**		
	Sig. (2-tailed)	.000	.000	.000		
	N	216	216	216		
Y	Correlation Coefficient	.969**	.580**	.698**	.632**	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.
	N	216	216	216	216	216

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

The first null hypothesis (Ho_1) predicted that teaching/learning resources do not have statistical relationship with teachers' discretionary work effort in government secondary schools in Isiolo County. The final results in the correlation analysis, Table 4.17, show a

Spearman's rho correlation value and corresponding coefficient, where, r = .969** and a P value is less than 0.05 for X_1. This indicates a strong statistically significant positive relationship between teaching and learning resources and teachers' discretionary work effort, (r= .969, p < 0.05).This finding led to the rejection of the first null hypothesis and the conclusion that there is a statistically significant positive association between teaching and learning resources and teachers' discretionary work effort in public secondary schools in Isiolo County. The positive association herein implies that an increase in the predictor variable (teaching and learning resources) results to an increase on the output variable (the teachers' discretionary work effort). Findings concurred with the observations of (Sogoni, 2017; Shakoor & Iqbal, 2017). Moreover, the Maslow (1948) hierarchy of needs was deeply supported through the affirmation of catering for basic needs including safety needs (information resources) before attaining progress to higher needs which are related directly to teachers' discretionary work efforts.

The second null hypothesis ($H0_2$) predicted that the principal's leadership characteristics do not have statistical relationship with teacher's discretionary work effort government secondary schools in Isiolo County. Table 4.17 reveals a Spearman's rho correlation value of.580**and a P value less than 0.05, indicating a statistically significant positive link between the principal's leadership attributes and the teacher's discretionary work effort (r=.580, p 0.05). Hence, the second null hypotheses is rejected and conclude that there is a statistically significant positive relationship between the principal's leadership characteristics and the teacher's discretionary work effort in public secondary schools in Isiolo County. The positive correlation implies that an increase in the predictor variable (the principal's leadership characteristics) causes an increase on the outcome variable

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(the teachers' discretionary work effort). Findings agreed with the report presented by Shakoor and Iqbal (2017), Sogoni (2017) and Muga (2018) who noted a statistically significant relationship between principals' leadership styles and teacher commitment at work. It was also clear that, the higher the principals were consultative and involved teachers, the higher the rate of outcomes.

The third null hypothesis (Ho_3) predicted that teachers' work characteristics do not have statistical relationship with teachers' discretionary work effort in government secondary schools in Isiolo County. The results in the correlation analysis (Table 4.17) show a Spearman's rho correlation value (r = .698**) and a corresponding correlation coefficient where the P value is less than 0.05. This indicates a statistically significant positive relationship between work characteristics and the discretionary work effort, (r= .698, p < 0.05.As a result, the study rejected the null hypothesis and found that there is a statistically significant positive link between teachers' job qualities and discretionary work effort in Isiolo County public secondary schools. The positive association implies that an increase in the explanatory variable (the work characteristics) causes an increase on the dependent variable (teachers' performance). Duyar et al. (2016) and Nwosu (2018) also identified that healthy work characteristic among teachers attracted allocation of administrative tasks by the presiding principals. Duyar et al. (2016) and Nwosu (2018) did not feature the existing relationship between teachers' work characteristics and teacher discretionary work effort in secondary schools.

The fourth null hypothesis ($H0_4$) predicted that the school culture does not have statistical relationship with teachers' discretionary work effort in government secondary

schools in Isiolo County. Table 4.17 displays a Spearman's rho correlation value of.632** and a P value less than 0.05.This indicates a statistically significant positive association between the school culture and teacher's discretionary work effort, (r= .580, $p < 0.05$).As a result, the study rejected the fourth null hypothesis and found that there is a statistically significant positive association between school culture and teachers' discretionary work effort in Isiolo County public secondary schools. The positive correlation implies that an increase in the independent variable (the school culture) causes an increase on the outcome variable (the teachers' discretionary work effort). Findings agreed with the report presented by Baars et al. (2018) and Avci (2016) who observed that positive school culture, environment and positive practices fostered teacher performance and work engagement.

4.8.1 Overall model on the school factors and teachers' discretionary work effort

This research focused on assessing the relationship between school environmental factors and teachers' discretionary work effort in government secondary schools in Isiolo County, Kenya. In the previous section, the study has reported results on hypotheses where all the school environmental factors (teaching and learning resources, principal's leadership characteristics, teachers work characteristics, and school culture) were individually proved to have a statistically significant relationship with the teachers' discretionary work effort. To test the overall purpose, the study examined the combined effect of the four school environmental factors on the teachers' discretionary work effort by conducting a binary logistic regression. Data on the independent variables (teaching and learning resources, principal's leadership characteristics,

teachers' work characteristics, and school culture) and the dependent variable (teachers' discretionary work effort) were dichotomized into either agree or disagree using the median. This allowed binary logistic regression to be computed in a combined model to determine the prediction of the independent factors on the outcome variable.

The study was able to identify the chance that a particular instance falls into one of two categories on the dependent variable as a result of the predictor factors by applying a binary logistic regression model. The binary logistic regression presupposes that the residuals are not normally distributed and have constant variance. It utilizes maximum likelihood to estimate the model parameters. In examining the fitness of the model in a binary logistic regression, a model containing all the predictors was used where a likelihood Chi-square based on the Omnibus and Hosmer-lemeshow tests helped to compare the full model with a null model. The contribution of the predictor factors to the dependent variable was assessed by assessing the pseudo-r-squared value, as proposed by (Smith & Mackenna, 2013). The Wald test statistic was used to assess the impact of each predictor at significant level of 5%.

The regression coefficients were useful in demonstrating the degrees in log-odds of falling in the dependent variable in this study. In the combined model, the regression coefficients specifically assisted in determining the change in teachers' discretionary work effort relative to a one unit change in the respective independent variable (teaching/learning resources, principal's leadership characteristics, teachers' work characteristics, and school culture). Tables 4.18, 4.19, and 4.20 show the results of the binary logistic regression analysis.

Table 4.28

School Factors and Teachers' Discretionary Work Effort: Model Fitness

Test (combined model)	Type of Statistic	Value of Statistic	df	P-Value
Omnibus	Chi-Square	26.213	4	.000
Hosmer and Lemeshow	Chi-Square	9.306	8	.317
Nagelkerke R Square				.527

The results in Table 4.18 show Omnibus test of model Chi-square statistics which help to demonstrate the predictive capacity of the model when the predictor variables of the study (teaching/learning resources, principal's leadership characteristics, teachers' work characteristics, and school culture) are regressed together in a combined model. Omnibus test of model Chi-square statistics specifically helped to determine the model's predictive capacity by comparing the full model (the model with all the predictor variables - combined)with a null model (model without predictors). The findings in Table 4.18show that the p – value of the combined model is 0.000, which is less than 0.05; that is, $\chi2$ (df=4) = 26.213; p<.005.This demonstrates that the model has statistically significant predictive ability.

The Hosmer and Lemeshow Chi-square statistics helped to determine whether the model is fit for prediction in this study. The underlying null hypothesis states that the model is fit while the alternate model is not fit. When using Hosmer and Lemeshow Chi-square statistics, the decision criterion is to reject the underlying null hypothesis if the P value is less than 0.05. The results in Table 4.18, show $\chi2$ (df8) = 9.306; p= .317. P value is more

than 0.05.This yields non-statistically significant findings, indicating that the model is a good match for prediction.

The findings in Table 4.18 further show that the four predictor variables jointly explain 52.7% of the variation on the teacher's discretionary work effort in government secondary schools in Isiolo County (R^2= .527).This shows that, in addition to school characteristics, there were other predictors that were not examined in this study that account for teachers' discretionary work effort in Isiolo County public secondary schools. The accuracy of the prediction was assessed by examining results in the classification table. The classification table in a binary logistic regression illustrates how effectively the model classifies instances based on group membership to the dependent variable. Table 4.19 displays the results.

Table 4.39

Classification Table one Teacher's Discretionary Work Effort

| | | | Predicted Teacher's discretionary work effort | | Percentage |
	Observed		Poor	Good	Correct
Step 1	Teacher's	Disagree	13	43	23.2
	discretionary	Agree	10	155	93.9
	work effort				
	Overall Percentage				76.0

a. The cut value is .500

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The results in Table 4.19 show an overall classification of 76% which is quite good; hence the accuracy of prediction of the model is assured in this study.

The results in Tables 4.18 and 4.19 indicate that all the four predictor variables (teaching/learning resources, principal's leadership characteristics, teachers' work characteristics, and school culture) are jointly significant in accounting for the variation in the teachers' discretionary work effort in government secondary schools in Isiolo County. The regression coefficients of each predictor variable in the combined model were also computed. The regression coefficient in a binary logistic regression shows the predicted change in log odds per unit increase on the predictor variable. The odd ratio column displays values that are understood as the multiplicative change in chances for each unit increment in a predictor variable. Where an odd ration is less than one, it is read as a decreasing likelihood of being in the dependent variable's target group, and vice versa. The results on regression weights are presented in Table 4.20.

Table 4.20

Regression Weights on School Factors and the Teacher's Discretionary Work Effort

		B	S.E.	Wald	df	Sig.	Odds RatioExp(B)
Step 1[a]	X_1	-.055	.296	.034	1	.198	.947
	X_2	.478	.371	1.656	1	.021	1.613
	X_3	.655	.451	2.109	1	.003	1.925
	X_4	.370	.704	.277	1	.048	1.448
	Constant	-4.217	1.323	10.156	1	.001	.015

The results in Table 4.20show that a marginal decrease in X_1 (teaching/learning resources) increases the logit of the teachers' discretionary work effort by -.055, while holding all other predictors constant. The odds ratio indicate that a unit increase in teaching/learning resources increases the odds (likelihood) of the teachers' discretionary work effort by .947, while controlling other factors. The results further show that a marginal increase in X_2 (principal's leadership characteristics) increases the logit of the teachers' discretionary work effort by .478, while keeping all other variables constant. Further, the odds ratio indicate that a unit increase in the principal's leadership characteristics, increases the odds (likelihood) of the teachers' discretionary work effort by 1.613 while controlling other factors.

The results also show that a marginal increase in X_3 (teachers' work characteristics) increases the logit of the teachers' discretionary work effort by .655, while keeping all other variables constant. Further, the odds ratio suggests that a unit increase in the teachers' work characteristics, improves the odds (probability) of the teachers' discretionary work effort by 1.925, while maintaining other factors constant. In terms of the final construct, the results demonstrate that a marginal increase in X4 (school culture) raises the logit of teachers' discretionary work effort by.370 while maintaining all other variables constant. Furthermore, the odds ratio indicates that a unit increase in school culture raises the chances (probability) of teachers' discretionary work effort by 1.448,

while other factors remain unchanged. As a result of the foregoing findings, the following model was developed:

$$\frac{P}{1-P} = b^{\beta 0 + \beta 1 X1 + \beta 2 X2 + \beta 3 X3 + \beta 4 X4}$$

The final binary logistic regression model is:

Ln (P/ (1-P)) = -4.217+ -.055X_1 + 0.478X_2 + 0.655X_3 + 0.370X_4

Where:

$\frac{P}{1-P}$ = refers to the response variable Y, that is, discretionary work effort in public secondary schools in Isiolo County

b = is the base of the logarithm

$\beta 0$ = is the Y-intercept, the exponentiation of log-odds

X1= Teaching/learning resources

X2 = Principals' leadership characteristics

X3 = Teachers' work characteristics

X4 = School culture

The results in Table 4.18 also indicate that the school factors are individually and jointly significant in influencing the variations in the teachers' discretionary work effort. However, when all factors are regressed together in a combined model, the

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teaching/learning resources cease to be significant. That, in the combined model, the significant school factors in influencing the teachers' discretionary work effort are the teachers' work characteristics followed by principal's leadership characteristics and the school culture in that order. Available previous literature outstandingly stressed the role of leadership styles (Sogoni, 2017; Shakoor & Iqbal, 2017; Muga, 2018) employed by secondary school principals in achieving teacher commitment, involvement and performance.

4.12 Summary of the Findings

This chapter summarizes the study's findings. Use of descriptive statistics such as mean, standard deviation, and percentages, as well as inferential statistics such as the Chi-square test, ANOVA, ordinal logistic, and regression analysis. The findings indicate that availability of teaching and learning resources, leadership characteristics, teachers work characteristics and school culture have statistically significant effect on teachers' discretionary work effort government secondary schools in Isiolo County. As a result, the null hypotheses were all rejected. The findings suggest that professional commitment has important implications for discretionary work effort of employees within secondary school sector and need to be explored. The findings also support, work environmental characteristics, organizational factors (e.g. leadership characteristics) and organizational culture as having direct influence on discretionary work effort behaviour.

The findings show that when people are empowered at work, it is connected with better job outcomes, job satisfaction, and organizational commitment. The discretionary work effort behavior that emerged from analysis was examined in relation to principals' and

teachers' opinion and from information gathered from interview participants to make it possible to determine the extent to which school environmental factors influenced employees' ability to make discretion at work place. The findings create and experimentally test a new motivational model of discretionary work effort that improves our knowledge of the nature and role of school environmental elements in driving employee work place participation. The findings create and experimentally test a new motivational model of discretionary work effort that improves our knowledge of the nature and role of school environmental factors in driving employees to increase their supply of discretionary work effort. The findings close a significant gap in the academic literature on employee discretionary work effort by revealing what school environmental factors are related to the facets of employees' discretionary work effort, as well as what work environment behavior teachers/employees perceive as influencing their ability to put extra effort.

Importantly, by disaggregating between employee discretionary work effort and employee motivation, this study provides further information on how school environmental elements are related to the various aspects of discretionary work motivation. Therefore, from a theoretical standpoint, our research illustrates the conceptual significance and empirical benefit of exploring different aspects of discretionary labor effort independently. From a practical perspective Identifying school-based environment factors connected with discretionary work effort improves managers' ability to harness this lucrative resource. This study found that in order to maximize the potential of human resources, managers must first understand the factors that likely influence discretionary work effort. It also highlighted the importance of leadership

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characteristics, school culture, and resource availability as factors that managers and the

Teachers Service Commission must cultivate positively with their employees

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The purpose of this study was to investigate the relationship between school environment factors and teachers' discretionary work effort in public secondary schools in Isiolo County. This chapter, therefore, outlines a summary of the conceptualization and implementation of the study. It also presents the conclusions arrived at after the analysis of data and finally the recommendations and suggestions for the improvement on the educational outcome of the Isiolo County public secondary schools.

5.2 Summary of the Findings

This chapter entails discussion on the research findings, recommendations and conclusions. Study instruments were pretested as described in chapter two. Use of Crombach's Alpha level was applied to determine the reliability of the data collection tools as discussed in chapter three. The Crombach's Alpha level coefficient was more than 0.7 for the four variables investigated. This confirmed that the variables were reliable for data analysis.

5.2.1 Background information of participants

The study focused on 48 principals, 720 teachers and two county educational administrators (MoE and TSC). After a sample selection, 14 principals, 216 teachers were randomly selected and two county educational administrators were purposeful selected. Data was collected through administration of questionnaires and interview schedule. However, despite the hardship experienced, the study realized a response rate of 94.7%.

The respondents' background information indicated that most of the respondents were male at 75.862% compared to female at 24.14%. The study noticed that most of the respondents were employees of Teachers' Service Commission at 90.94%, BOM at 8.62%. One respondent fell under the Ministry of Education at 0.43%. The study also captured job groups of respondents. The employee with the highest grade fell under job group R at 0.86%, followed by C4 at 53.89% which was the highest category of respondents. The remaining group fell at C3 at 10.34%, while the remaining were casuals employed by BOM. In reference to the above findings it was evident that respondents held high considerable job groups and were expected to be self-motivated and expending discretionary work effort.

Literature reviewed in chapter two identified that individual educational attainment was a guarantee of employees' professional development and influenced their work effort and level of production at work place. On this aspect respondents' educational background indicated that the highest number of respondents were degree holders at 83.0%. 7.93% had master's degree certificates and 7.76% were diploma certificate holders while the lowest was a PhD degree holder at 0.432%. According to the educational level of respondents, the researcher was assured of collection of relevant information for the study.

The duration of time one teaches in one institution clearly indicate the familiarity of an individual with the environmental factors; however, some environmental conditions were toxic and inhibited expression of the discretionary work effort of the employees. The findings on this objective indicated that all principals had a teaching experience of more than three years. It was therefore, evident that principals had enough experiences to influence employees discretionary work effort for optimum performance. The study also indicated that

most teachers (66.20%) had a teaching experience of more than three years, and only 4.62% had a teaching experience of one to three years. Evidently all the respondents had enough teaching experience to provide valid information on what influences discretionary work effort. Most respondents (77.03%) had taught between form three and form four while 26.90% of the respondents taught between form one and form two. The information on this contribution indicates the contributory role of the principals and teachers and the context of discretionary work effort at work place.

5.2.2 Availability of teaching and learning resources

Responses from teachers at 81% indicated adequacy of most relevant teaching and learning materials in most learning institutions. The importance of teaching/ learning materials in influencing teachers' discretionary work effort was evident in enhancing discretionary work effort as confirmed by the findings.

Qualitative data from the entire respondent from all the respondents indicated a common suggestion that employees needed to embrace modem teaching and learning strategies and models to enhance understanding of their subjects' content. This was in response to affirmation from most respondents that schools were supported by major stakeholders with teaching and learning materials and quality human resources. According to the director Ministry of Education, employees need more than current teaching and learning resources in order to be motivated. This statement was supported by the analysis that affirmed the importance of teaching and learning resources in motivating teachers to expend extra work effort. It was also noted that the Teachers' Service Commission had posted enough teachers to most schools. However, poor promotion policies and teachers stagnation on the same job

group demotivated teachers and affected their ability to expend more work effort. In conclusion, all the participants concurred with findings that teaching and learning resources were paramount in motivating teachers to go extra mile.

5.2.3 Results on principal's leadership characteristics

Information collected from this variable was basically related to leadership characteristics exercised by principals in secondary schools in Isiolo County, and how these styles influenced teachers' discretionary work effort. Findings asserted the significance role played by principals' leadership style in motivating teachers' discretionary work effort. The findings stated that teachers could expend more work effort if leadership characteristics were motivating and provided the necessary support required. Table 4.12 confirmed that teachers responded positively to most of the sentiments posted regarding leadership styles. This emphasized the importance role played by leadership styles practiced in motivating employees discretionary work effort.

Most respondents highlighted the importance of creating a system that recognized and supported teachers' work effort in order to induce their loyalty and commitment. Principals' opinion on motivating teachers was supported by the county educational administrators who emphasized on self-motivation since the Teachers Service Commission was remunerating teachers adequately. This was also supported by Maslow's hierarchy of needs theory that underscored that human behaviour are influenced to a higher needs when the lower needs are no longer desirable. The findings confirm that leadership style in a school plays an essential role in motivating teachers discretionary work effort and expending more time doing the same thing which is a determinant of a motivated teacher. However, most of the respondents,

emphasized on self-motivation since most institutions had minimal resources to reward their employee's work effort.

5.2.4 Summary results on teacher's work characteristics

Teachers work characteristic was also examined to identify its influence on teacher's ability to expend more work effort. Teachers response on all the sentiment provided was high with the ability to learn from other teachers (co-worker support) at 94.9%. All other sentiments posted high positive response followed by others sentiments that confirmed a high significant rate. Teachers work characteristics was also influenced by internal and external factors that included leadership characteristics, parental involvement and teachers own work characteristics. The findings confirmed that teacher's self-motivation was a point of concern in influencing work effort.

5.2.5 Summary results on school culture

The fourth objective in this study sought to identify the influence of school culture on teachers discretionary work effort in secondary schools in Isiolo County. The findings indicated that all the sentiments stated, ten aspects positively affected teacher's ability to expend extra work effort 81.5%-98.1%. These findings stated that school culture guided and promoted all school activities including teacher's ability to expend extra work effort to work maximally to their peak for the benefit of the school. Teachers confirmed that some activities had little influence on discretionary work effort and emphasized on a culture that nurtured teachers to be adaptive to the school situation. Principals' opinion on co-worker support to influence teachers in expending more work effort held both merit and demerit in motivating

teachers' ability to expend discretionary work effort. They argued that adoption of co-teaching enhanced growth in teaching competency and students learning which eventually brought improved institutional outcomes. County director's opinion agreed with teachers' view that principals should involve other stakeholders in developing school rules and objectives for easy adoption and implementation of the school policies. The importance of stakeholders' involvement in decision making confirmed that shareholders involvement in decision making was critical to ensured efficiency and effectiveness.

Emphasizing on the importance of principal's decision on creating a culture where the school environment accommodated positive work characteristics stated that ability to expend work effort is determined by leadership characteristics and work environment. This was also confirmed by organizational behaviour literature in chapter two that confirmed the importance of conducive work environment in influencing discretionary work effort of employees.

5.3. Conclusions

Personal observations and records from the Isiolo County education office have demonstrated that the Isiolo County secondary schools have been characterized by low retention, indiscipline cases, early pregnancies, as well as, posting poor academic outcome. These outcomes trigger the attention of all county education stakeholders to best understand the reason for the school outcomes. Records indicated that many other secondary schools in the neighboring counties and beyond were performing better as depicted by KSCE mean scores. This is despite many organizations (school included) striving for better performances. If there were other schools with better results within the same environment, then, there must be

factors within the schools that were causing the significant differences. Various literature reviewed indicated that there could be school environmental factors that influenced teachers to go their call of duty (discretionary work effort) that led to better outcomes beyond the normal expectations. After an intensive literature review, the researcher focused on the investigation of four basic school environmental factors (teaching/learning resources, leadership styles, teachers/employees work characteristics and school culture), which had been observed in various fields to influence the discretionary work effort of employees in schools and other organizations. There were four objectives set for the study. Consequently, the conclusions of the study have been organized as per the objectives.

Findings from objective one, noted that teaching and learning resources were positively and statistically associated with teachers discretionary work effort (r=.969, p<0.05). The H_{o1} that there is no significant relationship between teaching and learning resources was, therefore, rejected. It is therefore, concluded that there is a statistically significant positive relationship between teaching and learning resources and teachers discretionary work effort.

Results related to objective two, (To determine the influence of the principal's leadership styles on teachers discretionary work effort in public secondary schools in Isiolo County) indicated that the leadership styles were positively and statistically associated with the teachers discretionary work effort (r=.580, p<0.05). The H_{o2} that there is no significant influence of principal's leadership style on teachers discretionary work effort was, therefore, rejected. It is therefore, concluded that there is a statistically significant positive relationship between principal's leadership style and teachers discretionary work effort.

The third objective sought to establish the influences of teachers work characteristics on discretionary work effort in public secondary schools in Isiolo County, the results related indicated that work characteristics was positively and statistically associated with the teachers' discretionary work effort (r=.698, <0.05). The H_{o3} that there is no significant impact of the teachers work characteristics and teachers discretionary work effort was, therefore, rejected. It is therefore, concluded that there is a statistically significant positive relationship between teachers work characteristics and teachers' discretionary work effort.

From the findings of objective four, results have shown that there is a positively and statistically significant relationship between school culture and teachers discretionary work effort (r=.632.p<0.05). The H_{o4} that there is no significant effect of school culture on teachers' discretionary work effort is, therefore, rejected. The findings concluded that there is a statistically significant relationship between school culture and teachers' discretionary work effort, and that culture holds the historical belief of the school that determine its direction, work effort and outcomes.

5.4 Recommendations

Considering the whole study process and the results, the researcher advanced two of recommendations.

5.4.1 Recommendation from the results of the study

Findings on objective one, the availability of teaching and learning materials, and the study recommend that the Ministry of Education, school principals, as well as, other stakeholders should ensure adequate availability of teaching and learning facilities in schools such as

classrooms, laboratories and offices. The study also emphasized that these facilities should be well equipped with the necessary resources to make work easy and satisfying for teachers and other workers.

On the relationship of principal's leadership styles to discretionary work effort it is recommendation that the Ministry of Education should encourage and train the principals to use leadership characteristics such as democratic and transformational styles or a mix of various leadership styles that are appropriate for various school environments. Such styles should inspire teachers to fill needed, inspiring and involved in making various functional decisions. The leadership style(s) should be inclusive of all stakeholders such that all teachers and other staff feel part and parcel of the management process.

The findings of this study show that professional commitment has an implication for discretionary work engagement of employees. Employees who are committed at their places of work are said to be more motivated and discretionarily compared to those who are not committed at their work place. In relation to teachers' work characteristics (Objective four), it is therefore recommended that the principals and the Teachers Service Commission expose teachers to good work ethics such as training them to be competent in different teaching strategies, mastery of the teaching content, maintaining pupils discipline. Holding interactive meetings would go a long way to make them motivated and develop high morale.

It is recommended that the principal and the teachers should practice a tradition of values, motto and characteristics that are based on high standards, support for teachers' job characteristics, and supportive organisational factors, including leadership characteristics and co-worker support and organizational culture (objective four) to influence discretionary work

effort for best outcome. Principals and other stakeholders should nurture values and habits that bring about motivation and morale towards good teachers discretionary work effort. This brings about an environment where each school member's contribution is considered necessary for the productivity of the school outcome.

5.4.2 Implications and contributions to public sector motivational research

Literature in Chapter two noted that research on what motivates employees work effort to engage more at work place has been conducted much in private business organizations as compared to public organizations especially in academic sectors. As a result, several scholars have highlighted how relatively little is known about factors that influence employee motivation to expend their discretionary work effort in public organizations, moreso in academic sectors. Literature reviewed indicates that there is a concern as to what motivate some employees to be more engaged while others do minimally for the organization. The concern for managers to tap the work effort of their employees at work place is the gap in the literature that this research aimed to address. As public sector organizations undergo reform and face emerging pressures to improve their service delivery, it is evident to understand the extent to which those factors that are known to motivate and induce employees' discretionary work effort in private sector, translate to public sector organizations. Thus, the desire for more systematic empirical studies to enhance our understanding of how school managers could influence their employees to supply discretionary work effort and be more engaged is a concern. While there is a growing body of literature on factors that influence and motivate public sector employees, studies on employees discretionary work efforts in the academic sector remains low. Much

of these studies appear to be on the direction facet of discretionary work effort in economic and organizational behaviour with little literature on academic sector. Literature on the on factors that determine discretionary work effort has mostly been limited to the effects of individual dispositional especially on public service motivation circumstances minimally related to attitudinal characteristics with less emphasis on the influence of school environmental factors on employee work characteristics. This study bridge the gap in the literature by enhancing our understanding on how school environmental factors are related to the level of employee motivation and its influence in expending discretionary work effort and organizational outcomes.

5.4.3 Recommendation for further research

a) The study recommend that since employees discretionary work effort remain under researched among Kenyan public secondary schools teachers; more studies on the influence of school environmental factors and teachers discretionary work efforts should be conducted in most public secondary schools to further understand the influence of different school environmental factors on employees' work effort in the Kenyan context.

b) The study also recommends a replication of this study in other counties and probably with different school environmental factors.

c) Recommendations of a comparative study to understand the employees' characteristics of best performing schools in the country and also for schools that do not perform so well.

d) Carry out studies on other factors that may be contributing positively or negatively to teachers' discretionary work effort.

e) A recommendation to identify statistical relationship between employee level of motivation and ability to spend discretionary work effort should be conducted in Kenyan secondary schools.

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APPENDICES

Appendix I: Introductory Letter

Appendix 1: Letter to participants

Dear participant

I am a post graduate student at the department of Education and Social Sciences of Kenya Methodist University. I am conducting a research study to investigate, **"The influence of school environmental factors on teachers' discretionary work effort in public secondary schools in Isiolo County, Kenya"** This is in fulfillment of degree of Doctor of philosophy in leadership and Education management of Kenya Methodist University. You have been identified to take part in this study. I would be grateful to you if you would assist me to get required information on the above topic by responding to all the items in the attached questionnaire. Your name is not required to appear in the questionnaire. The information is confidential and will be used for research purpose only. Your co-operation will be highly appreciated. The completed questionnaire will be confidential. Thank you.

Yours sincerely

MAKERO JENIPHER

Appendix 2: Institutional Letter

Dear Sir/ madam

REF: PARTICIPATION IN RESEARCH

I am a post graduate student pursuing Doctor of philosophy Degree in Leadership and Educational Management of Kenya Methodist University. I am conducting a research on "The influence of school environmental factors on teachers' discretionary work effort in public secondary schools in Isiolo County, Kenya". This is kindly to request for your permission to conduct the study in your institution by involving your teachers in filling the questionnaires. The Information provided will be treated with uttermost confidentiality and will be used for the purpose of the study alone and your identity will be protected. Thank you for your cooperation and support.

Yours Faithfully,

MakeroJenipherTharaka

Appendix II: Questionnaire for Teachers

A. **Demographic characteristics**

Information in this questionnaire is strictly confidential and will be used for the purpose of this research study only. Respond to the questions by ticking (√) or providing the information needed on the spaces provided.

1. TSC Scale (job group) _____

2. Employer: TSC ( )   BOM ( )

3. Highest Academic qualification PhD ( ) Masters ( ) Bachelors ( ) Diploma ( )

4. Years of experience in secondary schools by years

- ( ) 1-3

- ( ) 4 - 6

- ( ) 7- 9

- ( ) 10+

5. Which classes are you teaching currently?

Form 1-2

Form 3-4

6. Indicate your gender

male	Female

Section B: **Teaching and Learning Resources and Teachers Discretionary Work Effort**

Please indicate with a tick the availability and adequacy of the following resource provisions in your school.

Material resources	Not Available	Available	Adequate	Inadequate
Books				
Charts				
Television				
Projectors				
Laptops / computers				
Maps				

8. In your opinion, explain how teaching and learning materials affect your ability to work and go an extra mile.

_____

_____

_____

_____

9. Please indicate the level of your agreement by putting a tick (√) regarding the following statements with respect to teaching and learning facilities.

	Statements on availability of teaching/learning	Highly disagree	Disagree	Neutral	Agree	Highly Agree

	facilities and material resources					
i	Availability of teaching/ learning facilities and material resources makes teachers to be more engaged					
ii	Availability of teaching/learning facilities and material resources makes teachers to engage students in more learning activities					
iii	Availability of teaching/ learning facilities and material resources makes teachers to be more motivated to go extra miles					
	Availability of teaching/ learning facilities and material resources makes teachers to be innovative in teaching					
	Availability of teaching/					

	learning facilities and material resources enable teachers to achieve desired goals					
	Availability of teaching/learning facilities and material resources results to teachers attaining high score in the performance appraisal					

10. With regards to teaching/learning facilities and material resources, what do you think should be done to make teachers go extra mile in their work?

Section C. Leadership Characteristics

- The following leadership characteristics motivate teachers' discretionary work effort. Please respond to each of the following statements with a tick ( )   in the spaces provided, to indicate your level of agreement.

Leadership characteristics	Highly disagree	Disagree	Neutral	Agree	Highly Agree
Inspiring , motivating and encouraging teachers to invest more work effort in their tasks and commitment					
Emphasizing work ethics, ethical behaviour and integrity in teaching					
Making teachers feel trusted with decisions or important asks/ activities					
Providing security for teachers from hazardous school environment					
Teachers following and always adhering to hierarchy and the corporate structure, and culture in the school					
Providing teachers with the tools,					

facilities and equipment they need to do their work					
aking teachers responsible for their wn actions					
Rewarding teachers when they do well					
Affording flexibility on how teachers operate to achieve better results					
Teachers following standards, expectations and targets achievement					
Treating teachers with respects					
Providing enough teaching and learning materials					
Providing teachers with sufficient guidance on achievement of teaching goals					
Celebrating good results with teachers					

Supporting and collaborating with teachers as they try new approaches and develop innovative ways of dealing with and achievement in school					
Making self decision about the school					
Allowing input from teachers in decision making					
Supervising teachers' progress of routine work					
Delegating the power to teachers that allow them to solve problems on their own					
Listening to teachers and sharing their feelings by guiding and counselling them					
Allowing teachers to be innovative and discovering new ideas in their subjects					
allowing teachers to work with					

minimum supervisions					
Establishing and communicating clear rules and regulations to be followed by teachers					
Following of strict directions or instructions given to teachers	2				
Communicating solutions to teachers explicitly and concisely for a shared vision of success					
Providing funding for educational tours and exactions					
Identifying with superiors and emulating them in teaching					
Rewarding teachers for behaving in an expected manner and reprimanding for any deviation					
Allowing teachers to make their own decisions on how to teach					
According teachers the time they need to accomplish their work					

School leadership taking responsibility for the group's decisions and actions					
Providing finances for extra-class activities					
Condoning and understanding mistakes made by teachers					
Being present, giving praises when things go right taking responsibility when things go wrong and providing constructive criticism to teachers					
Trusting that teachers can deliver good results with minimal supervision					
Listening and showing concerns and attention to problems happening outside the teachers' performances.					

11. In what ways are teachers involved in planning and development at your school?

12. Explain how the principal's leadership style inhibits or enhances teachers' ability to expend more work effort?

13. What leadership-related aspects should be changed in your school to help teachers expend more time and energy at work?

Section D Teacher's own characteristics

14. The following teacher characteristics affect their ability to expend discretionary work effort. Indicate the level of your agreement with each statement by ticking (√) appropriately.

Teacher characteristics	ighly sagree	Disagree	Neutral	Agree	ighly Agree
Ability to prepare professional documents					
Ability to apply different strategies in the classroom					
Making students participate in relevant activities					
Having a clear understanding and mastery of the					

teaching subjects				
Ability to learn from other teachers				
Being optimistic when rsuing new approaches				
Perceiving teaching as very critical and important in the school				
Being able to cope with other teachers				
Ability to apply pedagogy skills in handling different subjects				
Teachers being engaged and committed				

15. Suggest how teachers characteristics can be improved to enable them expend more time and energy at work.

Section E: School culture and teachers' discretionary work effort.

16. The following school cultural characteristics can positively or negatively affect teacher' ability to expend discretionary work effort. Please indicate your opinion by ticking (√) against each cultural practice.

Aspects of school culture	To a very extent	To a low extent	To a moderat ely	To a high extent	To a very high extent
Ceremonies to reward best achievers (teachers and students)					
Culture of trust and respect to all					
Using school resources to reward teachers					
Co-teaching with colleagues					
Respecting time as a school resource					
Co-operating with other stakeholders such as, parents and other members of the community					
Strict following of school rules, regulations and policies					
Obeying leaders authority without questioning regardless of the consequences					
Leaders ability to appreciate work effort expended					

Having a school policy on how to motivate teachers					
Culture of adhering to belief systems in the school					

17. List down some of the practices that affect teachers' work effort in this school? Write as many as possible.

18. Describe how aspects of school culture can be improved to enable teachers expend more time and energy at work**.**

Section F: Teachers' discretionary work effort

19. Please indicate the level of your agreement by putting a tick (√) regarding the following statements with respect to teachers' discretionary work effort.

Table 4.15

20. *Descriptive Statistics on Teachers' Discretionary Work Effort*

Statements on teachers' discretionary work effort.		Highly Disagree	Disagree	Neutral	Agree	Highly Agree
i	Nature of leadership in the school makes teachers to be more engaged and put extra effort in					

	teaching					
ii	How teachers are handled by school's leadership determine their ability to put extra effort in teaching					
iii	Availability of teaching/ learning facilities and material resources makes teachers to be more engaged and put extra effort in teaching					
iv	Functionality, proficiency in applying and using tools and equipment affect teacher's ability to put extra effort in teaching					

v	Teachers' attitude and conduct and behaviour in the school affect their ability to put extra effort in teaching				
vi	Teachers' characteristics and demeanour in the school affect their ability to put extra effort in teaching				
vii	The customs, beliefs systems, procedures, values and ethos practiced in the school affect their ability of a teacher to put extra effort in teaching				

21. What really keeps your discretion high and make you go an extra mile at your work?

22. What are some of the school-related aspects which inhibit teachers' ability to expend more work effort?

23. Suggest any improvement that should be adopted to keep teachers' discretion high in secondary school.

_____

_____

_____

_____

24. What should the teachers' employer do to enable teachers to expend more work effort?

Thanks for being a partner in this study. God bless you

Appendix III: Questionnaire for Principals

Information in this questionnaire is strictly confidential and will be used for the purpose of this research only. Your name is optional. Indicate your responses by ticking (√) all by providing the information required on the spaces provided.

Section A: Demographic factors

1. TSC Scale or job group ------------C5 ( ) D1(5)   D2 ( )   D3 (   ) any other ( ) specify

2. Highest Academic qualification PhD ( ) Masters ( ) Bachelors ( ) Diploma

3. teaching experience (6 months -2 years) (3-5 years) (6-8years) (9-10 years) (10+)

4. kindly indicate your gender

male	Female

5. Which Classes are you currently teaching? Form 1-2 ( ) Form 3-4 ( )

6. **Section B**: **Teaching and learning resources and teachers discretionary work effort**

   7. Does the school have enough resources as required? Mark with a tick (√) on the columns against each item respectively.

Physical facilities	Not available	vailable umber	rmanent/semi -permanent	emporar y	dequat e	ot equat
Classrooms						
Furniture						
Library						
School bus						
Secretary Office						
dministration block						
Store room						
Kitchen						
Teachers house						

8. List down key measures taken by your school to ensure availability of teaching and learning resources to enable teachers expend more work effort?

_____

9. With regards to teaching/learning facilities and material resources, what do you think should be done to make teachers go extra mile in their work?

216 (100%) of the respondent were for the opinion that the management should Provide enough teaching and learning resources, that are adequacy, current and reliable.

_____

Section C. Leadership characteristics

10. Describe how you involve teachers in planning and development at your school?

In what ways has your leadership style enabled teachers expend more work effort?

What leadership attributes has made you to be successful in inspiring teachers' performance in your school?

---

11. What are some of the things that you have done to enable teachers go extra miles.

12. What do you think should be changed with respect to leadership in secondary school to help teachers expend more time and energy at work?

Leadership attitude, the leader must appreciate teachers work and recognize their effort. Involve them in decision making and other school activities

13. **Section D Teacher's characteristics**

14. In what ways do characteristics of teachers affect their ability to expend more time and energy at work?

15. Explain some measures that you have put in place to support professional development of teachers in your school?

Section E: School culture and teachers' discretionary work effort

16. List down some of the school culture and practices prominent in your school that affect teachers' ability to go extra miles? Write as many as possible.

17. Explain what you have done in your school internal processes to ensure conducive work environment for teachers in order to foster better teaching achievement?

18. Describe how aspects of school culture can be improved to enable teachers expend more time and energy at work.

Section F: Teachers' discretionary work effort

19. Please indicate the level of your agreement by putting a tick (√) regarding the following statements with respect to teachers' discretionary work effort.

Statements on teachers' discretionary work effort	Highly disagree	Disagree	Neutral	Agree	Highly Agree
Availability of teaching/ learning facilities and material resources makes teachers to be more engaged and put extra effort in teaching					
Nature of leadership in the school makes teachers to be more engaged and put extra					

	effort in teaching				
	How teachers are handled by school's leadership determine their ability to put extra effort in teaching				
	Teachers' characteristics and demeanour in the school affect their ability to put extra effort in teaching				
	Teachers' attitude and conduct and behaviour in the school affect their ability to put extra effort in teaching				
	The customs, beliefs systems, procedures, values and ethos practiced in the school affect their ability of a teacher to put extra effort in teaching				
	Internal processes, communication and				

	governance					

20. What are some of the school-related aspects which inhibit teachers' ability to expend more work effort?

21. Suggest any improvement that should be adopted to keep teachers' discretion high to expend more work effort in secondary school.

22. What should the teachers' employer do to enable teachers to expend more work effort?

Be blessed for being a partner in this research process.

Appendix IV: Interview Schedule for County Director (TSC)

Demographic Information

Information gathered from the interviews will be strictly and will be used for the purpose of this research study only.

1. Kindly what is your Job group _____

2. Employer: TSC ( )   Ministry of Education ( )

3. Highest Academic qualification PhD ( ) Masters ( ) Degree ( )

4. Years of experience as a County Director

5. Year of stay at current station

- ( ) 1- 3 years
- ( ) 3- 5
- ( ) 6 - 8
- ( ) 9 - 10
- ( ) 10+

6. Indicate your gender

male	Female

Section A: **Teaching and Learning Resources and Teachers Discretionary Work Effort**

7. How does TSC support the availability of teaching and learning resources in secondary schools?

8. What are your comments regarding availability, adequacy and utilization of teaching/learning resources in secondary schools in Isiolo County?

9. Howdoes TSC ensures that standards utilization of available teaching and learning resources is adhered to?

Section B. Leadership Characteristics

10. Describe your leadership characteristics ?--

----

11. What leadership characteristics are you aware which contribute to teachers working beyond their official time/work descriptions? --- --- --- ------------

12. What do you think should be done or changed with respect to principals' leadership style in secondary school to enhance teachers' expend more time and energy at work? ------------- --- --- ----------------------------

Section C: Teacher's Characteristics

13. In what ways do characteristics of teachers affect their ability to expend more time and energy at work? --- --- ---

14. Suggest how teachers' characteristics can be improved to enable them expend more time and energy at work.

--- --- ----------------------------

Section D: School Culture and Teachers' Discretionary Work Effort

15. According to your understanding, what aspects of school culture can be improved to enable teachers expend more time and energy at work. --

----

Section E: Teachers' Discretionary Work Effort

16. What is the position of the TSC regarding teachers expending more work effort in secondary schools?

Working late hours is discouraged by ministry

17. Shed some light on policy guidelines from the TSC regarding secondary school teachers working on remedial teaching?--

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18. What has the Teachers Service Commission done to enable teachers to expend more work effort?

Appendix V: Interview Schedule for County Director of (Ministry of Education)

Demographic information

Information gathered from the interviews will be strictly and will be used for the purpose of this research study only. --

----

Kindly what is your Job group _____

1. Employer: TSC ( )   Ministry of Education ( )

2. Highest Academic qualification PhD ( ) Masters ( ) Degree ( ) Diploma ( )

3. Years of experience as a County Director

4. Year of stay at current station

- ( ) 1- 3 years

- ( ) 3 -6

- ( ) 6 - 8

- ( ) 9 -10

- ( ) 10+

5. Indicate your gender

male	Female

Section A: **Teaching and Learning Resources and Teachers Discretionary Work Effort**

6. How does the Ministry of Education support the availability of teaching and learning

resources in secondary schools in Isiolo County? --

----

7. What are your comments regarding availability of teaching/learning resources in

secondary schools in Isiolo County?---

8.Briefly, how does the Ministry of Education ensures that utilization of teaching and

learning resources in secondary schools are adhered to?--

Section B. Leadership characteristics

9. What leadership characteristics practiced in your schools contributes to teachers working

beyond their official time? ---

10.What do you think should be done or changed with respect to principals' leadership characteristics in secondary school to enhance teachers' expend more time and energy at work?

- **Section C: Teacher's characteristics**

11. In what ways do characteristics of teachers affect their ability to expend more time and energy at work? --
----

12.Suggest how teachers characteristics can be improved to enable them expend more time and energy at work.--
----

Section D: School culture and teachers' discretionary work effort

13.Describe how aspects of school culture can be improved to enable teachers expend more time and energy at work.--

----

Section E: Teachers' discretionary work effort

14. What is the position of the Ministry of Education regarding teachers expending more work effort in secondary schools?

- **Working late hours is discouraged by ministry do you agree?**

15.Shed some light on policy guidelines from the Ministry of Education regarding secondary school teachers teaching remedial classes ?--

----

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16. What has the Ministry of Education done to enable teachers to expend more work effort?

Appendix V1

Map of Isiolo County