Original Research Article

1 2

> 3 4

Strategies for Increasing Students' Self-motivation

5 6 7

8

ABSTRACT

Aim: To identify the strategies for increasing self-motivation for academic improvement among secondary school students in Kisumu County, Kenya

Sample: The study population was 113,314 students enrolled in secondary schools in Kisumu County. Convenient sampling technique was used to draw a sample of 224 students.

Study design: The study employed phenomenological design in the qualitative approach.

Place and Duration of Study: The place of the study was Kisumu County, Kenya, between September and October 2017.

Methodology: Focus group discussions were used to collect qualitative data. Focus group discussion guide was piloted with students who did not participate in the study to establish validity and reliability. Data was collected verbally, transcribed verbatim, and summarized using thematic analysis to yield significant themes.

Conclusion: The findings revealed that strategies that might be effective in increasing selfmotivation are self-discipline, goal orientation, integrated extrinsic motivation, time management and autonomy-supportive teaching and learning environment.

10 11

12

13

14 15

16

17

18 19

20

21 22

23

24

25

26

27 28

29

30

support

Keywords: strategies; motivation; self-discipline; goals; extrinsic; time management; autonomy-

1. INTRODUCTION

1.1 Background of Study

Motivation is a significant psychological concept in education because it drives and strengthens the students to learn and improve in their academic performance [1, 2, 3]. Motivation is essential to learning since some sort of motivation underlines everything students do, including students' motivation complete tasks that build knowledge [3]. Therefore, lack of motivation in students to learn was identified as a pressing educational problem by [4].

Students' self-motivation to learn is of great importance today probably more than ever before. One authority on motivating students, [5], starts the book "Motivating students to learn" with these alarming words.

"School is inherently boring and frustrating. We require students to come, then try to teach them stuff that they do not see a need for and do not find meaningful. There is little support for academic achievement in the peer culture, and frequently in the home as well. A few students may be enthusiastic about learning, but most of them require the grading system and the carrots and sticks that we connect to it to pressure them to do at least enough to get by."

These words are an indictment on the level of self-motivation among students to learn and they are an indication of the challenge faced by practitioners in the teaching and learning process.

- 31 In addition, [6] found out that self-motivation is necessary among students because many of the tasks 32 that educators want their students to perform are not inherently interesting or enjoyable. Therefore,
- 33 the strategies for motivation should be wedded into the everyday teaching and learning process.
- 34 Motivation is a construct that explains goal-directed behavioral force to face tough and challenging 35 circumstances characterized by initiation, direction, intensity, persistence, and quality of behavior [5,

- 36 7]. Consequently, [8] posit that to be motivated means to be moved to do something, which in the
- 37 case of the present study is to learn. Motives, on the other hand, are hypothetical constructs used to
- 38 explain why people are doing what they are doing [5].
- 39 The opposite of motivation is amotivation, which was defined by [9] as the absence of intrinsic or
- 40 extrinsic incentives for behavior and growth. An amotivated student's behavior lacks intentionality and
- 41 personal causation because they do not value the behavior, do not feel competent at the behavior
- 42 and not believing the behavior will yield the desired outcome [6; 10].
- 43 The observation that children are very motivated to learn when they are young but this motivation
- 44 seems to dissipate as they go up the grades was confirmed in a study in Brazil by [4]. They presented
- an assessment of the quality of motivation of elementary school students using a questionnaire. The 45
- results revealed that lack of motivation increased as students advanced in grades. This makes one 46
- 47 wonder what happens to the learners' self-concept as they proceed up the grades that make them
- 48 lose self-motivation.
- 49 Several studies have considered the causes and effects of motivation [7, 9, 11, 12]. In China, [11]
- examined the relationship between students' academic self-concept and motivation in foreign 50
- language learning drawing samples from university and found that academic self-concept was 51
- positively and significantly correlated with learning motivation. Furthermore, from a study in Canada, 52
- 53 [9] found that motivation precedes and predicts academic behavior and therefore, motivational
- 54 orientation is a reliable and accurate predictor of academic success. In addition, a review of the
- 55 motivation theories in learning by [7] found out that motivation and learning process are connected for
- educational success. Subsequently, [12] explored the effects of achievement motivation on academic 56
- 57 achievement in the USA and reported positive correlations between achievement motivation and
- 58 academic performance. However, these studies did not go ahead to identify how students' motivation
- 59 might be increased.
- 60 The onus of increasing students' motivation to learn, however, falls squarely on teachers and
- educators. [8] in Self-Determination Theory (SDT) categorized motivation into extrinsic and intrinsic 61
- 62 motivation. They defined intrinsic motivation as referring to doing something because it is inherently
- 63 interesting or enjoyable; and extrinsic motivation as referring to doing something because it leads to a
- 64 separable outcome. Therefore, [1] in Portugal investigated the relationship between students'
- motivation and perceived learning and found that intrinsic motivation positively and significantly 65
- 66 influences perceived learning. In addition, [2] investigated extrinsic motivation in South Africa and 67 identified verbal reinforcement, goal orientation, time management and reflective practice as effective
- 68 strategies for increasing motivation among students.
- 69 Consequently, although teachers sometimes feel that they have no control over students' attitudes
- 70 about learning, they actually do have an influence because generally students learn if their teachers
- expect and motivate them to learn [13]. Motivation to learn, therefore according to [14], can be 71
- 72 increased by strategies that increase students' awareness of self-directed learning. Nevertheless, do
- 73 teachers have the right ideas on the strategies that can effectively motivate the students?
- 74 Strategies are the methods used to achieve goals and thus to satisfy motives, such as the desire to
- 75 learn [5]. That was the reason for the study by [15] in Saudi Arabia that examined teacher and student
- 76 views about motivational strategies. The results indicated there was a discrepancy in the beliefs of
- 77 teachers and students about how the students should be motivated. Teachers preferred strategies
- 78 that help students to achieve desired academic outcomes while students preferred strategies that
- 79 zeroed in on the learning process and promoted the social aspects of learning, such as participation
- and interaction.
- 81 Nevertheless, in Kenya, few studies have investigated student motivation and academic performance
- 82 and little research has been on strategies to increase students' motivation. [16] sought to determine if
- 83 student motivation has any influence on academic performance in public secondary schools in
- Nairobi, Kenya. The study revealed that self-motivation among students is a major factor in academic
- performance. In addition, the study identified giving of prizes to students as the most effective 85
- motivational technique to the students. However, the study did not identify general strategies that 86
- 87 might be used to increase students' self-motivation to learn and thereby improve their academic
- 88 performance. There was therefore need for the current study to identify the strategies for increasing
- 89 self-motivation among secondary school students in Kisumu County, Kenya.

91

92

93

94

95

96

97

98

99

100

101

102

103

104

1.2 Problem Statement

One of the indicators of low student self-motivation is school dropout rates [17, 18]. Kisumu County has a secondary school a dropout rate of 33.6%, which is above the national average [19]. Consequently, only 25% of Kisumu County residents have a secondary level of education or above [19]. This means that the high dropout rates are excluding three out of four members of the county from secondary school education. However, education improves people's welfare because inequality declines as the average level of educational attainment increases, with secondary education producing the greatest benefits [19]. This might be the reason why those working for pay with a secondary level of education or above are only 32% of in Kisumu County, which is 17 points below the 49% found in Nairobi County, Kenya. Furthermore, the low employment rate from school dropout due to low self-motivation might contribute to the high poverty levels in Kisumu County, which is 47.8% [20]. For these reasons, self-motivation to learn among students is an important need with serious consequences for Kisumu County, Kenya. Hence, there was need for the present study on strategies of increasing the self-motivation among students in Kisumu County, Kenya.

1.3 Relevance of Study

- The findings of the present study might be used to improve the academic performance of students because self-motivation is positively associated with academic performance [12, 9]. This makes the findings of the current study are of importance to teachers and other stakeholders in education.
- In addition, these strategies might be helpful in preventing school dropout because self-motivation is negatively associated with dropout rates [17, 18]. Moreover, the findings might be useful in inculcating lifelong learning in the recipients because lifelong learning is positively associated with self-motivation
- 111 [21].
- Moreover, [8] argue that motivation is highly valued because of its consequences and is of
- preeminent concern to managers, teachers, religious leaders, health care providers, and parents.
- Therefore, the findings of the present study might be of benefit to not only teachers but also parents
- 115 and education managers.

116 2. PURPOSE OF THE STUDY

- 117 The purpose of the study was to investigate self-motivation for improvement in academic performance
- among secondary school students. The objective of the study was to identify the strategies for
- 119 increasing self-motivation among secondary school students in Kisumu County, Kenya

120 3. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

121 3.1 Theoretical Framework

- The Self-Determination Theory (SDT) of [8] guided the present study. Self-determination theory (SDT)
- is a theory of human motivation that focuses on types of motivation and pays attention to autonomous
- motivation, controlled motivation, and amotivation as predictors of performance [22]. SDT posits that
- 125 people can be motivated or amotivated due to the social conditions around them. Following from that
- premise, SDT-guided research focuses on facilitating self-motivation.
- 127 In addition, [8] posit that the arena of SDT is the investigation of the conditions that foster the positive
- 128 processes of people's inherent growth tendencies and innate psychological needs. Consequently, the
- 129 present study focused on strategies for increasing self-motivation among students, which according to
- 130 [8] are factors that enhance intrinsic motivation, self-regulation, and well-being.
- 131 The SDT produced the concepts of self-regulation, causality orientation, types of motivation and
- 132 psychological needs. From these concepts the present study explored time management and self-
- 133 discipline from self-regulation, goal orientation from causality orientation, extrinsic motivation from
- types of motivation and autonomy-supportive teaching and learning from psychological needs.

3.2 Literature Review

- The literature review for the present study was organized according to the themes that emerged from data analysis. [23] investigated the relationship between teacher motivation and students' academic achievement at secondary school level in India. Survey technique was used to collect data through a questionnaire and analyzed using inferential statistics, which revealed that intrinsic motivation of teachers was having strong correlation with academic achievement of the students. Therefore, [23] recommended that in-service teacher training programs can be used to enhance teachers intrinsic motivation for the improvement of students' academic performance. However, the study was a quantitative study that only collected quantitative data that was limited in that the researchers could not delve in-depth into the meanings and feelings of the respondents. The present study filled this gap by using qualitative methods to collect data which captured the meanings and feelings of the respondents.
- Subsequently, [24] conducted an analysis of determinants and factors motivating students in higher education in Morocco with university students. The study pointed out the importance of self-motivation among the students by showing that motivation during orientation and learning process influenced positively the academic performance of learners. However, the study did not identify the strategies that might be used to increase self-motivation among the students.

3.2.1 Self-Discipline

- A theme that emerged on how to increase self-motivation among students was the promotion and teaching of self-discipline among students. According to [25], self-control is the capacity to bring one's actions into line with one's self as it is embodied in what one takes oneself to have most reason to do.

 Therefore, in the current study, self-discipline is the capacity to control one's thoughts, speech and deeds to attain a desired achievement. The importance of self-discipline was captured by [26] who wrote a paper that showed that self-discipline in daily routine knowledge acquisition processes was key in improving learning outcomes.
- SDT is an approach to human motivation that highlights humans' inner resources for personality development and behavioral self-regulation [22]. Therefore, the present study drew self-discipline from the concept of self-regulation from SDT. Since, SDT highlights the importance of self-regulation, the present study explored self-discipline as a strategy for increasing students' self-motivation.
 - According to [27] discipline minimally influences self-motivation. The study by [27] investigated motivation, discipline and employee performance in Indonesia. The results showed a minimal influence of motivation and discipline that affect the performance. However, the study was conducted with employees and not students, as was the case in the present study. Therefore, [28] investigated the relationship of self-control, motivation and academic performance in Germany. Data was collected from a sample of tenth graders using a questionnaire. Results of regression analyses showed that self-control was a significant predictor of academic performance. However, the study did not consider the effect that self-discipline might have on students' motivation. Therefore, the present study filled this gap by investigating the effect of self-discipline on students' levels of self-motivation.
 - In addition, although [29] in USA posited that self-regulation of effort is a significant predictor of academic performance, the study only made finding that that academic self-discipline mediated the relationship between academic self-efficacy and academic performance. Hence, the study did not examine the relationship between self-discipline and academic performance directly unlike in the present study. Moreover, [30] compared students' self-discipline and self-regulation measures and their prediction of academic achievement using a multi-source, multi-measure research design involving high school students and their teachers in USA. Hierarchical regression analyses revealed that students' self-regulation was more predictive of students' academic performance than students' self-discipline. However, [31] who also studied self-control and academic performance in a university set-up in the USA had contrary findings to [30]. Moreover, [31] found out that self-control affects academic performance among the university students.
- The findings of [31] were further supported by those of [32] who investigated self-control and academic performance in engineering among college students in the USA. The results showed that self-control predicted the academic performance of students. However, these studies were done with university students whose levels of education are higher than those of students found in Kenyan

- secondary schools. Consequently, [33] conducted a longitudinal study with eighth-grade students on self-discipline measured by questionnaires in USA. The study revealed that self-discipline accounted
- 191 for more than twice as much variance as Intelligence Quotient in academic performance.
- 192 Nevertheless, the [33] study did not seek to identify the promotion of self-discipline as a means of
- increasing self-motivation among students. The present study filled these gaps in literature by
- 194 examining strategies for increasing self-motivation among students in secondary schools.
- 195 On the other hand, [34] and [35] reported contrary findings in the relationship between self-discipline 196 and academic performance. In Taiwan [35] sought to determine the effects of self-control and 197 intelligence quotient on students' academic achievement and found that intelligence quotient 198 predicted students' academic performance in the short term but not in the long term. This left the 199 relationship between self-discipline and academic performance undetermined. Subsequently, [34] in 200 Iran investigated the relationship between self-control and academic performance and found a 201 negative correlation between self-control and academic achievement. However, the finding of [36] fell 202 between those of [34] and [35]. In Germany [36] conducted a study of students and found that there 203 were no effects of academic discipline on achievement over time. Therefore, whereas [35] found 204 conflicting effect of self-discipline on academic performance between short-term and long-term 205 durations, [36] found no effects of self-discipline on academic performance and [34] found negative 206 correlation between self-discipline and academic performance. Nevertheless, none of these studies 207 considered the effect of self-discipline on self-motivation and yet academic performance is a product 208 of self-motivation. In addition, these studies were conducted in Asia and Europe with different cultural 209 settings from African countries such as Kenya.
- Therefore, [37] sought to determine the level of discipline and extent of impact of discipline on academic performance among grade eight in a descriptive study in Muhoroni Sub-County in Kisumu County, Kenya. Data analysis revealed that discipline related positively with, and accounted for 23% of variance in the pupils' academic performance. Therefore, the study recommended enhancement of discipline among the pupils for improvement of their academic performance. However, [37] did not examine the effect of self-discipline on students' self-motivation. The present study filled this gap in
- examine the elect of sen-discipline of students sen-motivation. The present study lined this ga
- literature by seeking to elucidate the effect of self-discipline on self-motivation.

3.2.2 Goal Orientation

- Goals are valued outcomes that people hope to attain when they engage in certain behaviors [10]. Furthermore, [22] posits that to guide their activities, people use long-term goals, which might be
- Furthermore, [22] posits that to guide their activities, people use long-term goals, which might be intrinsic aspirations such as personal development and extrinsic aspirations such as wealth and fame.
- 221 This result in causality orientation to the way people orient themselves to their environment for
- regulation of behavior, and thus be self-determined to achieve what they believe they need [22].
- 223 Consequently, the present study explored goal orientation as a strategy of increasing self-motivation
- in students.

217

- Goals are the drivers of behavior and the immediate objectives of particular sequences of behavior [5,
- 226 38]. Consequently, according to [2], motivation might be indicated by personal goal setting. Goal-
- orientation is therefore behavior that is energized by values, which refers to the desirability of the goal
- to the individual and expectancies, and beliefs about the attainability of goals [38]. According to [38],
- 229 all else held equal, an individual will be more persistent in pursuing a goal when that goal is greatly
- valued and when the individual expects to be successful in attaining the goal. The persistence that is
- generated by goal orientation might be indicative of the relationship between goal orientation and self-
- 232 motivation.
- In addition, [39] identified the technique of goal-setting as a way of enhancing motivation in learners
- 234 because higher standards tend to lead to higher performance. However, learner-set goals have a
- tendency to become lower, hence, teacher's role in helping learners maintain high standards by
- monitoring the goals set and reinforcing high standards [39]. Therefore, [39] posited that learners
- 237 might be taught to be self-motivated to learn through the practice of goal setting.
- 238 Subsequently, [40] investigated goal orientation and goal setting in South Korea by integrating four-
- 239 factor goal orientation theory with goal setting theory and found that goals positively influenced
- 240 performance. However, the study did not examine the influence of mastery and performance goals on
- academic performance. In addition, [41] examined the relationship between student goal orientation
- and academic achievement in Germany. Data collected from college students was analyzed to reveal

- that students pursuing both mastery and performance goals were more motivated and had higher academic performance than students who pursue a mastery orientation alone.
- However, [42] argued that it was mastery goals, and not both mastery and performance goals, that produced self-motivation in students. In a paper, [42] discussed mastery and performance goals in a paper on motivation in education. The paper expounded that mastery goals were more likely to result in persistence over time and a focus on the intrinsic value of learning because mastery goals focused on individual improvement and the belief that increased effort is related to increased competency. On the other hand, competition and rewards foster a performance goal orientation in which ability and self-worth are linked in students' minds hence students avoid the possibility of failure by not attempting challenging tasks [42]. Nevertheless, [40], [41] and [42] did not examine the effect that goal orientation had on students' self-motivation to learn. The present study filled this gap in literature by seeking to elucidate whether goal orientation among students might increase their self-motivation to learn and improve in academic performance.

3.2.3 Extrinsic Motivation

In SDT, [6] posited that extrinsic motivation varies in its relative autonomy and thus can reflect either external control or true self-regulation. According to [6] and [22], autonomous motivation comprises of intrinsic motivation and the types of extrinsic motivation such as introjection, identification and integration. Furthermore, [8] posited that integrated regulation is the most autonomous form of extrinsic motivation. They argue that integration occurs when identified regulations are assimilated through evaluation and brought into congruence with one's inner values and needs.

Consequently, [13] reported that intrinsically motivated students earn higher grades and employ strategies that demand more effort than extrinsically motivated students do. Moreover, they are more likely to persist with and complete assigned tasks, retain information and concepts longer, and are more likely to be lifelong learners than extrinsically motivated learners are. In a word, intrinsically motivated students are expected to be having more self-motivation than extrinsically motivated students are. In New Zealand, [43] used a novel multidimensional instrument to investigate the relationship between motivation and academic achievement. The results showed that there were statistically significant differences for motivation and achievement. However, the study did not consider the effect of type of motivation on academic performance. Subsequently, in the USA, [44] and [45] studied the influence of type of motivation on academic achievement. [44] sought to determine whether type of motivation was predictive of how a student would perform in an exam and found that student performance in the exam was not significantly related with an intrinsic motivation. Furthermore, [45] studied type of motivation, student motivation, and achievement and found that students with intrinsic motivation achieved better academically, and were more persistent in their studies than students with extrinsic motivation did.

Nevertheless, the studies by [43], [44] and [45] were quantitative in nature and therefore could not probe the responses for deeper meanings, which is only possible with a qualitative study. Therefore, [46] in Australia conducted a qualitative case study on how motivation influences student engagement and found that intrinsic motivation assisted authentic student engagement in learning, and that extrinsic motivation served to develop ritual engagement for learning. However, the study by [46] did not consider whether teaching and training students to have any type of motivation of control would result in a higher level of self-motivation. The present study filled these gaps in literature by using the qualitative approach that captured the in-depth meanings of the respondents to investigate the relationship between type of motivation and self-motivation among students.

3.2.4 Time Management

- SDT is an approach to human motivation that uses an organismic metatheory to emphasize humans' inner resources for behavioral self-regulation [22]. Since, SDT underlines the importance of self-regulation, the present study explored time management as a strategy within self-regulation for increasing students' self-motivation.
- Time management is a set of principles, practices, skills, tools, and systems used to get more value out of a given amount of time with the aim of improving the quality of achieving a set goal [47]. Therefore, [48] posit that time management skills are essential for students' success and development of academic competence. Consequently, [49] investigated the relationship between various study

skills and academic performance of university students in Iran. Data analysis revealed that the study skills scores for students with high academic performance were statistically higher than that of those students with low academic performance in time management and motivation. This finding indicated that time management influences students' academic performance but did not consider the self-motivation that makes students' to manage their time well. Nevertheless, when [50] in USA and [51] in Malaysia investigated motivation and time management they found that motivation and time management are significant predictors of academic success and performance respectively.

However, the studies by [49], [50] and [51] did not investigate the relationship of time management and self-motivation although time management affects performance. For that reason, [52] studied the impact of time management on performance among faculty members of universities India. Data was collected using closed-ended questionnaires from faculty members and students and analyzed inferentially to reveal that time management increases motivation. In addition, [53] studied the impact of time management on academic performance among college students in the USA and found out that there was a significant and positive correlation between time management and academic performance of the students. Nevertheless, the studies by [52] and [53] were on time management and performance, and not time management and motivation. Therefore, [48] sought to determine the relationship between time management skills and academic motivation of students in Iran. Data was collected using questionnaires from a sample that was selected using random stratified sampling and analyzed inferentially. The results showed a statistically significant positive correlation between the students' time management scores and academic motivation scores. Therefore, the study concluded that it is necessary to plan for improving time management skills in order to enhance academic motivation among students.

The studies by [48], [52] and [53], though, were limited in that they were purely quantitative studies that could not capture the feelings and meanings of respondents to flesh up the findings. Consequently, [54] employed the qualitative approach to investigate the relationship between time management and motivation among teacher educators in institutions of higher learning in Pakistan. Data were collected using interview schedules and analyzed using narrative analysis to reveal that improvement in the skills of time management among teacher educators led to an increase in motivation. However, the study was conducted using students in institutions of higher learning whose time management skills might be different from those of secondary school students. Therefore, [28] investigated the relationship of time management and motivation with academic performance in Germany using tenth graders and found that time management characterized with procrastination was negatively related to school grades.

On the other hand, [55] explored how time management and the perception of control over time contribute to academic success of students in colleges in USA. The paper reviewed extant literature that suggested that college success does not rely solely on students' time management behavior, but more on their perception of control over time. This study raised the issue of the difference between time management and perception of control over time because a person who manages their time might be expected to have a perception that they are in control over their time.

However, several studies reported that time management affected academic performance among students and reported conflicting findings [56, 57, 58, 59]. The research by [56] and [58] sought to determine the relationship between the time management skills and academic achievement of the students in Kuwait and Oman respectively using descriptive research and found out that time management was significantly correlated with students' academic performance. Contrary to these findings, [57] and [59] explored the relationship between time management skills and the academic achievement in empirical studies and found that there was no statistically significant relationship between time management skills and the academic achievement of students. However, these studies were done in countries that are not in Africa with the continents unique sense of time. There was therefore need for a study to investigate the influence of time management on self-motivation in an African country such as Kenya.

Therefore, [60] investigated the relationship between time management and academic performance among orphaned students of Kenya. The sample was drawn using saturation sampling technique and data collected using questionnaires analyzed using inferential statistics to reveal a high positive correlation between time management and academic achievement. Nevertheless, the study did not

consider the influence of students' time-management and their levels of self-motivation although self-motivation mediates the relationship between time management and academic achievement. There was therefore need for the present study to investigate whether time management might be used to increase students' levels of self-motivation.

3.2.5 Autonomy-Supportive Teaching and Learning Environment

- Autonomy-supportive teaching is teaching that results in autonomous motivation of the students. SDT postulates that humans have three innate psychological needs of competence, autonomy, and relatedness, which when satisfied result in enhanced self-motivation [10, 22]. Autonomy-supportive teachers catalyze in their students greater intrinsic motivation, curiosity, and the desire for challenge [6]. Subsequently, the present study explored autonomy-supportive teaching as a strategy for increasing students' self-motivation.
- According to [13], strategies for increasing students' motivation include promoting mastery learning, creating a school culture that emphasizes the importance of academic achievement, involving parents in efforts to increase student motivation and consistent communication of academic purposes and expectations [13]. These techniques are envisaged to give the student the autonomy to explore and the safety of support and guidance as the student explores their environment. However, the methods to use in autonomy-supportive teaching remained to be explored.
- Therefore, [61] in the Netherlands presented tips on how to engage in autonomy-supportive teaching behaviors that stimulates motivation in students. The teaching tips they presented included nurturing students' needs with emotional support, guided active participation in class with optimal challenges. and use of empowering language [61]. However, these tips left out parents and friends of the student who might be necessary in autonomy-supportive learning. This was important because [9] had found that relatedness with teachers, parents, and friends to offer unique complementary contribution to the academic pursuits with parents having a more important influence on students' academic values than teachers or friends do. Effective teachers therefore, might be expected to use supportive autonomy techniques to generate self-motivation in their students.
 - In addition, [62] investigated second language learners' motivation and the ways in which the teachers supported the students' motivation in Thailand. Data was collected using questionnaires and observation schedules. The study findings showed that while autonomy-controlling strategies were commonly used, autonomy-support strategies were found only in highly motivated and high performing classrooms. The findings suggested the use of strategies that initialize and nurture students' internal motivation in order to enhance sustainable learning. However, the study was a purely quantitative one that did not probe the respondents meanings as is found in the present qualitative study.
 - This is what [63] found out, when reporting that motivating teachers use far more supportive motivational practices than non-motivating teachers who use a preponderance of practices that undermine student motivation. In the study, [63] presented motivation strategies for academic achievement as extrinsic rewards, cooperative learning, social interactions, student autonomy and choice, situational interest, goal setting, competition, relevancy, meaning-making and real world connections. This suggests that study techniques involving group work and peer teaching might be successful in increasing students' self-motivation. However, this was left unexplored and hence the present study filled that gap in literature.

4. MATERIAL AND METHODS

4.1 Research Design

- This study used the phenomenological design within the qualitative approach. Phenomenological design, according to [64], is a flexible method that is adapted to be suitable in explicating the phenomenon under investigation. Qualitative research relates to understanding aspects of social life and generates words as data for analysis [65].
- The phenomenological design within the qualitative approach was appropriate for the present study because [10] posits that SDT is a theory of human motivation that examines a wide range of phenomena across gender, culture, age, and socioeconomic status. The present study therefore

- 402 investigated the strategies for increasing students' self-motivation as a phenomenon that is explicated
- from the respondents using explanation of feelings and meanings as data.

404 4.2 Study Participants

- 405 The study participants were students in secondary school in Kisumu County, Kenya. The population
- 406 of the study was 113,314 secondary school students. A sample of 224 students was drawn from the
- 407 population using convenient sampling technique. The sample was fairly small in relation to the
- 408 population because, according to [65], samples in qualitative studies are usually small and not
- necessarily representative of the broader population. The sample was then divided into four focus
- 410 groups of 56 students each from which qualitative data was collected using a focus group discussion
- 411 guide. Focus groups were used to collect data because teenagers find it easier to express themselves
- 412 in groups [66].

413 4.3 Demographic Information

- 414 Demographics information in research is important because it might highlight salient differences in the
- 415 responses and cause better understanding of the results [67]. The present study had a sample that
- 416 included 112 girls and 112 boys with an age bracket from 17 to 20 years old. A majority of the
- 417 students came from low-income socioeconomic homes found in the slums of Kisumu County.

418 4.4 Research Instrument

- The data collection instrument was focus group discussion guide using the method of data collection
- 420 called focus group discussion from a focus group. According to [68], focus group is a planned,
- 421 facilitated discussion designed to obtain perceptions on an issue in a permissive, non-threatening
- 422 environment [68]. The focus group guide used in the present study was piloted for trustworthiness
- 423 using students who did not participate in the final study. Focus groups are good for generating
- 424 creative ideas by allowing participants to question each other and to elaborate upon their answers in a
- 425 spontaneous give and take social interaction [68].

426 4.5 Data Collection Procedures

- 427 The purpose and objective of the study were communicated to the participants before the time for
- 428 data collection. The Focus Group members' selection was on a voluntary basis with guidance from
- the researcher who was also the facilitator of the discussion. Each focus group chose a secretary who
- 430 was writing down what the participants were saying in summarized form while the researcher taped
- 431 the discussions verbatim.

432 4.6 Data Analysis

- 433 The qualitative data collected was analyzed using thematic analysis according to the steps of
- 434 thematic analysis, which are familiarization with the data, coding, searching for themes, reviewing
- themes, defining and naming themes and writing up [69].

436 5. RESULTS AND DISCUSSION

- 437 The data was analyzed according to the objective of the study. The study findings revealed that there
- were strategies that might be effective in increasing students' self-motivation.

439 5.1 Self-Discipline

- 440 The first thematic area to emerge in data analysis was that of self-discipline. The respondents
- 441 reported that practice of self-discipline would result in the students having the self-motivation to
- 442 achieve academic success. One respondent said, "I would advise fellow students to accept
- 443 correction, be focused, avoid laziness and stop indiscipline," as another reported, "Students should
- 444 know that discipline, determination, teamwork and prayer leads to success."
- The finding that self-discipline is perceived to be able to increase students' self-motivation was similar
- 446 to the findings of [29], [30], [35] and [37] who reported a positive association between self-discipline
- 447 and self-motivation as captured in academic performance. The finding of the present study was

- 448 however opposed to those of [27] who reported that discipline minimally influences self-motivation,
- 449 [34] who reported a negative relationship between self-control and academic performance and [36]
- 450 who reported no effects between self-discipline and self-motivation.
- 451 The theoretical framework for the present study, SDT, has been presented as seeking to understand
- 452 human motivation by underscoring humans inner resources for personality development and
- behavioral self-regulation [22]. Therefore, the finding of the present study that self-discipline, which is
- 454 a form of self-regulation, might be used as a strategy for increasing students' self-motivation, agreed
- with this postulate of SDT.

456 **5.2 Goal Orientation**

- 457 The second thematic area to emerge was that of goal orientation. The respondents expressed the
- 458 belief that if students have goal orientation in their academic lives then they would be self-motivated
- 459 to achieve academic success. A respondent captured this when he said, "They should avoid saying
- 460 that will not pass exams, be persistent, have a dream, have a goal to achieve and be ambitious." In
- addition, another student expressed herself about the goal orientation when she said, "Students
- 462 should have plan and goals, have targets, think about their future and think big."
- The finding of the present study that goal orientation might be used to increase students' self-
- 464 motivation for academic achievement was similar to [38], [39], [40] and [41] who had found that all
- 465 types of goal orientation resulted in higher academic performance mediated by self-motivation. The
- 466 finding of the present study was however opposed to that of [42] who had reported that only mastery
- 467 goals motivated academic achievement.
- 468 In SDT, which formed the theoretical framework for the present study, [22] have posited that people
- 469 use long-term goals to guide their activities to achieve intrinsic aspirations and extrinsic aspirations in
- 470 causality orientation. Therefore, the finding of the present study that use of goals that is the product of
- 471 goal orientation might be effective in increasing students' self-motivation agrees with the postulate of
- 472 SDT on causality orientation.

473 **5.3 Extrinsic Motivation**

- The third theme to emerge was the efficacy of extrinsic motivation to produce self-motivation. The
- 475 respondents felt that extrinsic motivation would successfully result in the learners being self-motivated
- 476 to achieve academic success. Concerning those who needed self-motivation, a respondent said,
- 477 "They should be advised to acquire new method of learning" before another added, "They should go
- 478 back to the study tips they used to use. The student should look where the rain started beating you
- 479 (African Proverb meaning, Look for your solutions where your problems started)."
- 480 A third respondent said, "The teachers should increase pressure (pressure is euphemism among the
- 481 students for punishment) on the person so that they perform better academically." Moreover, another
- student said, "The student should look for a new method of studying."
- 483 The finding of the present study that extrinsic motivation might be effective in building the students'
- 484 self-motivation was similar to the findings of [43] and [44]. These studies had suggested that extrinsic
- 485 motivation was effective in increasing the self-motivation among students.
- On the other hand, the finding of the present study was contrary to the findings of [13], [45] and [46].
- 487 These studies had reported that self-motivation increased with intrinsic motivation and not extrinsic
- 488 motivation.
- In the theoretical framework of the present study, [6] and [22] had posited that extrinsic motivation
- 490 might be effective in increasing self-motivation because of the more autonomous aspects of extrinsic
- 491 motivation such as introjection, identification and integration. These more autonomous types of
- extrinsic motivation, [8] further posited, were almost as effective as intrinsic motivation because the
- 493 motivated persons assimilated new values through evaluation, and brought the values into
- 494 congruence with their inner values and needs. This construct of integrated extrinsic motivation
- 495 explains why students in the present study reported that extrinsic motivation might be used to
- increase their self-motivation, which is an intrinsic motivation.

516

5.4 Time Management

- 498 The fourth theme to emerge from the findings of the present study was that time management was
- 499 effective in increasing students' self-motivation. On how to increase the self-motivation among the
- students, one of the students responded by saying, "They should be time conscious, have personal
- 501 time table that they actually use, make good use of their time and avoid procrastination." Another
- responded by saying, "They should spend more time studying and stop wasting time with betting,
- 503 chating, storytelling and walking up and down".
- The finding that time management leads to increase in self-motivation to learn among students was
- similar to a preponderance of studies [48, 49, 50, 51, 52, 53, 54, 60]. These studies had all reported
- 506 that time management increased academic performance, which in the present study is mediated by
- 507 self-motivation.
- The findings of the present study were however contrary to those of [55] and [56]. In addition, it was
- 509 contrary to findings by [58]. These studies had all reported that there was no relationship between
- 510 time management and academic achievement.
- 511 The theoretical framework of the present study, SDT, approaches human motivation using an
- organismic metatheory that emphasizes humans' inner resources for behavioral self-regulation [22].
- 513 Therefore, the present study, which investigated time management within self-regulation, concurred
- 514 with the postulate of SDT when it found out that time management might be used to increase
- 515 students' self-motivation.

5.5 Autonomy-Supportive Teaching and Learning Environment

- 517 The fifth theme to emerge from the present study was the use of autonomy-supportive environment in
- 518 increasing students' self-motivation. Asked on how to increase students' self-motivation, some
- 519 respondents reported that, "The members of the senior classes should act as role models" as another
- 520 student said, "They could consult their peers, stop discouraging one another and hold group
- discussions." In addition, a respondent said, "They should have fellow students helping them not to
- 522 miss anything ('guardian angels'), have good friends who don't mislead them into maladaptive
- 523 behaviors and have a study partner," as yet another student reported, "They should practice peer
- 524 teaching, read about success stories, socialize with top students."
- 525 The finding of the present study that autonomy-supportive teaching might be effective in increasing
- 526 students' self-motivation was similar to studies by [62] and [63]. The finding of the present study was
- also similar to findings of studies by [13] and [61].
- 528 The theoretical framework of the present study. SDT postulated that humans have three innate
- 529 psychological needs of competence, autonomy, and relatedness, which when satisfied result in
- 530 enhanced self-motivation [22, 10]. Accordingly, autonomy-supportive teachers catalyze in their
- 531 students greater intrinsic motivation, curiosity, and the desire for challenge [6]. Therefore, the finding
- 532 of the present study that autonomy-supportive teaching and learning environment increased students
- self-motivation was in concurrence with the postulate of SDT on psychological needs of competence,
- autonomy, and relatedness. .

6 CONCLUSIONS AND RECOMMENDATION

The present study makes the following conclusions:

- i. That there are strategies, which teachers, parents and educational managers and other stakeholders may use to increase students' self-motivation to learn.
- ii. That these strategies include teaching and training students' in self-discipline, goal orientation, extrinsic motivation, time management and autonomy-supportive environment.
- The present study recommends that students should be taught and trained using the strategies that increase self-motivation so that they are self-driven to achieve academic success and lifelong learning.

535 536

538

539

540

541

542

543

544

REFERENCES

- 547 1. Ferreira, M., Cardoso, A. & Abrantes, J. (2011). Motivation and relationship of the student with the 548 school as factors involved in the perceived learning. *Procedia - Social and Behavioral Sciences*; 549 29: 1707 – 1714.
- Kistnasamy, E. J. (2014). The power of extrinsic motivation in tertiary education. *American Journal of Educational Research*, Vol. 2, No. 6, 383 388.
- 3. Nguyen, C. (2008). *Student motivation and learning*. Masters' Thesis. Center for Teaching Excellence, United States Military Academy, West Point, NY.
- 4. Rufini, S. É., Bzuneck, J. A. & Oliveira, K. L. (2012). The quality of motivation among elementary school students. *Paidéia, Vol.* 22, No. 51, 53 62.
- 55. Brophy, J. (2004). *Motivating students to learn, second edition*. Mahwah: Lawrence Erlbaum Associates, Publishers.
- 558 6. Ryan, R. M. & Deci, E. L. (2000b). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*, 54 67.
- Gopalan, V., Bakar, J., Zulkifli, A., Alwi, A. & Mat, R. (2017). A review of the motivation theories in learning. The 2nd International Conference on Applied Science and Technology 2017 (ICAST'17).
- 562 8. Ryan, R. M. & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, Vol.* 55, No. 1: 68 78.
- Legault, L., Green-Demers, I. & Pelletier, L. (2006). Why do high school students lack motivation
 in the classroom? Toward an understanding of academic amotivation and the role of social
 support. *Journal of Educational Psychology, Vol. 98*, No. 3, 567–582
- 10. Deci, E. L. & Ryan, R. M. (2015). Self-determination theory. *International Encyclopedia of the Social & Behavioral Sciences, 2nd edition, Volume 21*, pp. 486 491.
- 11. Liu, H. J. (2010). The relation of academic self-concept to motivation among university EFL
 students. Feng Chia Journal of Humanities and Social Sciences, No. 20: 207 225.
- Herrero, D. M. (2014). The relationship among achievement motivation, hope, and resilience and
 their effects on academic achievement among first year college students enrolled in a Hispanic serving institution. Doctoral Dissertation. Texas A&M University-Corpus Christi Corpus Christi,
 Texas
- 575 13. Brewster, C. & Fager, J. (2000). *Increasing student engagement and motivation: From time-on-task to homework.* Northwest Regional Educational Laboratory.
- 14. Farquharson, A. (2003). Enhancing the self-directed learning skills of students entering practicum.
 SCUTREA Conference Proceedings, pp. 37 56.
- 579 15. Alshehri, E. A. (2013). *Motivational strategies: The perceptions of EFL teachers and students in the Saudi higher education context.* Doctoral Dissertation. University of Salford.
- 16. Ritho, R. (2015). The influence of student motivation on academic performance in public
 secondary schools in Dagoreti Subcounty, Nairobi, Kenya. Post Graduate Diploma in Education
 Project, University of Nairobi.
- 584 17. Chinyoka, K. (2014). Causes of school dropout among ordinary level learners in a resettlement 585 area in Masvingo, Zimbabwe. *Journal of Emerging Trends in Educational Research and Policy* 586 *Studies (JETERAPS) 5*(3): 294-300.
- 18. Doll, J., Eslami, Z. & Walters, L. (2013). Understanding why students drop out of high school, according to their own reports: Are they pushed or pulled, or do they fall out? A comparative analysis of seven nationally representative studies. *SAGE Open*, 1 15.
- 19. Kenya National Bureau of Statistics (KNBS, 2013). Exploring Kenya's inequality: Pulling apart or
 591 pooling together? Kisumu County. Kenya National Bureau of Statistics (KNBS) and Society for
 592 International Development (SID).
- 20. Commission for Revenue Allocation (2011). Kenya County Fact Sheets. Retrieved on April 3 2018
 from http://siteresources.worldbank.org/INTAFRICA/Resources/257994-
- 595 1335471959878/Kenya_County_Fact_Sheets_Dec2011.pdf
- Martin, G. (2011). Understanding motivation for lifelong education, through biography, complexity
 and control. Doctoral Dissertation. University of Birmingham

- 598 22. Deci, E. L. & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology, Vol. 49*, No. 3: 182 185.
- Akhtar, S., Iqbal, M. & Tatlah, I. (2017). Relationship between intrinsic motivation and students'
 academic achievement: A secondary level evidence. *Bulletin of Education and Research, Vol. 39*,
 No. 2: 19 29.
- Osma, I., Kemal, F. & Radid, M. (2015). Analysis of determinants and factors motivating students
 in higher education: Case of the students of chemistry at the Ben M'sik faculty of sciences.
 Procedia Social and Behavioral Sciences, 197: 286 291.
- 606 25. Henden, E. (2008). What is self-control? Philosophical Psychology, 21:1, 69 90.
- 607 26. Gorbunovs, A., Kapenieks, A. & Cakula, S. (2016). Self-discipline as a key indicator to improve 608 learning outcomes in e-learning environment. *Procedia - Social and Behavioral Sciences*, 231: 609 256 – 262.
- 27. Priyono, P., Marzuki, M. & Soesatyo, Y. (2016). Influence of motivation and discipline on the
 performance of employees: Studies on, CV Eastern Star Home in Surabaya). *Journal of Global Economics, Management and Business Research, 5*(3): 212 220.
- Kuhnle, C., Hofer, M. & Kilian, B. (2011). The relationship of self-control, procrastination,
 motivational interference and regret with school grades and life balance. *Diskurs Kindheits- und Jugendforschung Heft 1*, S. 31 44.
- 29. Jung, K. R., Zhou, A. Q., & Lee, R. M. (2017). Self-efficacy, self-discipline and academic
 performance: Testing a context-specific mediation model. *Learning and Individual Differences*, 60,
 33 39.
- 30. Zimmerman, B. & Kitsantas, A. (2014). Comparing students' self-discipline and self-regulation
 measures and their prediction of academic achievement. *Contemporary Educational Psychology,* Volume 39, Issue 2: 145 155.
- 31. Zettler, I. (2011). Self-control and academic performance: Two field studies on university
 citizenship behavior and counterproductive academic behavior. *Learning and Individual Differences, Volume 21*, Issue 1: 119 123.
- 32. Honken, N., Ralston, P. & Tretter, T. (2016). Self-control and academic performance in engineering. *American Journal of Engineering Education, Volume 7*, No 2: 47 57.
- 33. Duckworth, A. L. & Seligman, M. E. (2005). Self-discipline outdoes IQ in predicting academic performance of adolescents. *Psychological Science*, *Vol. 16*, No. 12: 939 944.
- 34. Karim, S. & Ghavam, E. (2011). The relationship between self-control, self-effectiveness,
 academic performance and tendency towards academic cheating: A case report of a university
 survey in Iran. *Malaysian Journal of Distance Education*, 13, (2): 1 8.
- 35. Wu, H., Kung, F., Chen, H. & Kim, Y. (2016). Academic success of "Tiger Cubs": Self-control (not IQ) predicts academic growth and explains girls' edge in Taiwan. Social Psychological and Personality Science, 1 8.
- 36. Tarabashkina, L. & Lietz, P. (2011). The impact of values and learning approaches on student achievement: Gender and academic discipline influences. *Issues in Educational Research, 21*(2): 210 231.
- 37. Simba, N. O., Agak, J. O. & Kabuka, E. K. (2016). Impact of discipline on academic performance of pupils in public primary schools in Muhoroni Sub-County, Kenya. *Journal of Education and Practice, Volume* 7, No. 6: 164 173.
- 38. Srivastava, S., & Angelo, K. M. (2009). Optimism, effects on relationships. In H. T. Reis and S. K. Sprecher (Eds.), *Encyclopedia of human relationships*. Thousand Oaks, CA: Sage.
- 39. Saylo, M. C. & Saylo, M. M. (2015). Goal-oriented anxiety-free learning: A teaching-learning theory. *International Journal of Education and Learning, Vol. 4*, No.1: 27 34.
- 40. Radosevich, D., Allyn, M. & Yun, S. (2007). Goal orientation and goal setting: Predicting
 performance by integrating four-factor goal orientation theory with goal setting processes. *Seoul Journal of Business. Volume 13.* Number 1: 21 47.
- 41. Roebken, H. (2007). Multiple goals, satisfaction, and achievement in university undergraduate
 education: A Student Experience in the Research University (SERU) project research paper.
- 650 Center for Studies in Higher Education, Research & Occasional Paper Series, pp 1 20.

- 42. Stirling, D. (2013). Motivation in education. *Aichi Universities English Education Research Journal*, 29: 51 72.
- 43. Anderson, A., Hattie, J. & Hamilton, R. (2005). Locus of control, self-efficacy and motivation in
 different schools: Moderation, the key to success? Self-Concept Research: Driving International
 Research Agendas, 1 16.
- 44. Carpenter, J. H. (2010). Locus of control & motivation strategies for learning questionnaire:
 Predictors of student success on the ATI Comprehensive Predictor exam & NCLEX-RN
 examination. Doctoral Dissertation. University of Kansas.
- 45. Kader, A. A. (2014). Locus of control, student motivation, and achievement in principles of
 microeconomics. *American International Journal of Contemporary Research*, Vol. 4, No. 9: 1 11.
- 46. Saeed, S. & Zyngier, D. (2012). How motivation influences student engagement: A qualitative case study. *Journal of Education and Learning; Vol. 1*, No. 2: 252 267.
- 47. Eastern Illinois Univeristy (n.d.). Time Management. Retrieved on April 4 2018 from
 http://www.eiu.edu/herc/downloads/TimeManagement.pdf
- 48. Ghiasvand, A., Naderi, M., Tafreshi, M., Ahmadi, F. & Hosseini, M. (2017). Relationship between
 time management skills and anxiety and academic motivation of nursing students in Tehran.
 Electronic physician. Volume 9, Issue 1: 3678 3684.
- 49. Hassanbeigi, A., Askari, J., Nakhjavani, M., Shirkhoda, S., Barzegar, K., Mozayyan, M. &
 Fallahzadeh, H. (2011). The relationship between study skills and academic performance of
 university students. *Procedia Social and Behavioral Sciences, Volume 30*, pp. 1416 1424.
- 50. Basila, C. (2014). Good time management and motivation level predict student academic success
 in college on-line courses. *International Journal of Cyber Behavior, Psychology and Learning,* 4(3), 45 52.
- Kamaruddin, S., Omar, K., Muda, M, Saputra, J. & Ismail, S. (2017). Motivation, time
 management and work performance among female workers in Malaysia. *International Journal of Advanced and Applied Sciences*, 4(12): 273 280.
- 52. Channar, Z., Shaikh, S., Pathan, P. & Mughal, S. (2015). *Impact of time management on organizational performance*. Retrieved on 30th March 2018 from http://sujo.usindh.edu.pk/index.php/THE-WOMEN/article/view/883/834.
- 53. Kaushar, M. (2013). Study of impact of time management on academic performance of college students. *Journal of Business and Management, Volume 9*, Issue 6: 59 60.
- 54. Sahito, Z. & Vaisanen, P. (2017). Effect of time management on the job satisfaction and motivation of teacher educators: A narrative analysis. *International Journal of Higher Education, Vol.* 6, No. 2: 213 224.
- Twehues, A. (2013). Success and the balance of commitment and time: Effects of perceived time
 management control on college student performance. Honors Theses. 130. Retrieved on March
 31, 2018 from https://encompass.eku.edu/honors theses/130
- 56. Nasrullah, S. & Khan, M. (2015). The impact of time management on the students' academic achievements. *Journal of Literature, Languages and Linguistics, Vol. 11*, pp. 66 71.
- 57. Pehlivan, A. (2013). The effect of the time management skills of students taking a financial
 accounting course on their course grades and grade point averages. *International Journal of Business and Social Science, Vol. 4* No. 5: 196 203.
- 58. Sayari, K., Jalagat, R. & Dalluay, V. (2017). Assessing the relationship of time management and academic performance of the business students in Al-Zahra College for women. *European Business & Management. Vol. 3*, No. 1: 1 8.
- 59. Swart, A., Lombard, K. & Jager, H. (2009). Exploring the relationship between time management
 skills and the academic achievement of African engineering students a case study. *European Journal of Engineering Education*, *35*, 1: 79 89.
- 699 60. Oyuga, P., Raburu, P. & Aloka, P. (2016). Relationship between time management and academic performance among orphaned secondary school students of Kenya. *International Journal of Applied Psychology*, *6*(6): 171 178.

- Kusurkar, R. A., Croiset, G. & ten Cate, O. J. (2011). Twelve tips to stimulate intrinsic motivation
 in students through autonomy-supportive classroom teaching derived from Self-Determination
 Theory. *Medical Teacher*, 33:978 982.
- 705 62. Vibulphol, J. (2016). Students' motivation and learning and teachers' motivational strategies in 706 English classrooms in Thailand. *English Language Teaching; Vol. 9*, No. 4: 64 – 75.
- 63. Girmus, R. (2011). *How to motivate your students*. Paper presented at the National Institute for Staff and Organizational Development Conference, May 27-30, 2012, Austin, TX.
- 64. Holroyd, C. (2001). Phenomenological research method, design and procedure: A
 phenomenological investigation of the phenomenon of being-in-community as experienced by two
 individuals who have participated in a community building workshop. *IndoPacific Journal of Phenomenology*, *1*:1, 1-10.
- 713 65. Patton, M. & Cochran, M. (2002). *A guide to using qualitative research methodology*. Retrieved on April 4 2018 from https://cloudfront.ualberta.ca/-/media/science/research-and-teaching/teaching/qualitative-research-methodology.pdf
- 66. Nyumba, T., Wilson, K., Derrick, C. & Mukherjee, N. (2018). The use of focus group discussion
 methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, 9:20 32.
- 67. Beel, J., Langer, S., Nürnberger, A. & Genzmehr, M. (2013). The Impact of Demographics (Age and Gender) and Other User-Characteristics on Evaluating Recommender Systems. In proceedings of the 17th International Conference of Digital Libraries (TPDL, 2013), pp. 400 404.
 Valletta, Malta.
- 68. Campbell, R. (2008). *Guide to focus group discussions*. Retrived on April 4 2018 from
 https://www.marketlinks.org/sites/default/files/resource/files/ML6294_mr_138_guide_to_focus_group_discussions.pdf
- 69. Clarke, V. & Braun, V. (2013). Teaching thematic analysis: Overcoming challenges and developing strategies for effective learning. *The Psychologist, 26* (2). pp. 120 123.