Relationship between Risk Taking and Academic Achievement among form Two Students in Nairobi County, Kenya

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Abstract: Low academic achievement in Nairobi County has been of great concern especially in the last few years. Research studies conducted earlier have attributed this to various causes including environmental and some psychological factors. This research focused on examining the relationship between students' risk taking and academic achievement in Nairobi County, Kenya. Elkind's Adolescent Egocentrism theory guided the study. Correlational design was adopted to demonstrate the correlation between the variables. The population of target was the entire year 2019 Form Two students in public high schools, Nairobi County. To select research location, purposive sampling was used while stratified sampling helped identify the class. Finally, simple random sampling procedure was applied in selecting participants. The study sample comprised of 738 students picked from eight secondary schools. Adolescents' risk taking scale was adopted and used to evaluate students' risk taking behaviour. In order to assess students' academic achievement, records of examination grades maintained in individual schools were consulted. Both descriptive and inferential statistics were used to analyze collected data. Multiple regression analysis was used to establish prediction model. The study results revealed a weak negative statistically non-significant correlation between risk taking and academic achievement r (738) = -.031, p > 0.05. Similarly, two subscales of risk taking were found to be negatively correlated to academic achievement though not significantly. Only general invulnerability subscale revealed a positive but weak and insignificant relationship with academic achievement. Therefore, the study recommended that educators and other relevant stakeholders consider looking into other factors that may be behind low academic achievement in students. This will allow for application of appropriate intervening measures.

Key Words: Risk Taking, Academic Achievement, Danger Invulnerability, Interpersonal Invulnerability, General Invulnerability

Objectives/Hypothesis of the Study

The objective of the study was to establish the relationship between risk taking and academic achievement.

The following null hypothesis guided the study:

H_{01}: There is no significant relationship between students' risk taking and academic Achievement

I. INTRODUCTION/ BACKGROUND OF THE STUDY

Low achievement in academic work is a major concern for individual students and society in general (Daka, 2019). This is because academic achievement has for a long time been used as a yardstick to assess an individual's education level. On the authority of United Nations Education Scientific and Cultural Organization (UNESCO, 2014), education plays a vital part when it comes to the enhancement of human growth in both social and economic realms. In the year 2015, United Nations International Children's Emergency Fund (UNICEF) noted that not only does education reduce poverty levels, but it also enhances individuals' income as well as their empowerment. Honken & Ralston (2013); Daka & Changwe (2020) opined that academic achievement is important for both concrete and abstract reasons. They observed that, a good grade point average (GPA) in high school increases a student's chance of admission into a college of choice, improves their eligibility for scholarship and eventually job opportunities. Even in the work place, newly graduated students are considered for job placement on the basis of their academic achievement. Researchers all over the world have demonstrated that low academic achievement can negatively affect students' expected participation in development (Ali et al., 2014 Daka, Banda and Namafe, 2017).

Academic achievement is mainly determined by grades achieved in national examinations at the end of a school level. As a result, great importance has been attached to good grades by many in the society. Because of this, many reforms within the education sector continue to be undertaken globally in respect to education systems in an attempt to improve academic achievement (Kgosikebotha, 2013). Indeed governments all over the world continue to channel a lot of resources towards improvement of education. Additionally, education has been entrenched in countries' constitutions as a basic right for all.

Evidence has shown that students' personal factors do influence academic achievement (Daka, 2019; Kakupa, Tembo and Daka, 2015). This study investigated the relationship between students' risk taking behaviours and academic achievement. According to Elkind's Adolescents

Egocentrism Theory (1967), it is the personal fable tenet which gives adolescents a sense of invulnerability that motivates them to engage in risk taking behaviours. On the other hand, Wang et al. (2015) opines that, risk taking is informed by an individual's perception of potential harm that they might be exposed to within their environment; which in turn, determines behavioural response. Some of the prevalent risk behaviours include smoking, anti-social behaviour, hazardous alcoholic consumption and unprotected sexual intercourse; and are associated with increased risk of poor academic attainment, future mobidity and premature mortality. Other risk taking behaviours include drug abuse, binge drinking and pornography. Such behaviours tend to interfere with concentration in school work, ultimately leading to low academic achievement (Yan & Brocksen, 2013).

According to Duggan et al. (2001), adolescents' feelings of invulnerability towards harmful situations, can be classified into three levels; danger, general and interpersonal invulnerability depending on the potential risks they face. Danger invulnerability refers to felt risk to external danger like car accidents, drug use and drinking of alcohol. General invulnerability refers to psychological distress, while interpersonal invulnerability is about social disappointment or risk posed by other peoples' opinions. The three are all predictive of negative consequences likely to distract a learner's focus from learning activities and lead to low academic outcome. The current research aimed at determining how the levels of invulnerability may predict academic achievement especially of students in Nairobi County, Kenya.

In Kenya, as in other African countries, low academic achievement has been of concern. The trend in the Kenya Certificate of Secondary Education Examination (KCSE) is such that results continue to drop year after year. This is the examination that enables those who have performed well to transit to University and other tertiary institutions. Poor performance then, means that a good percentage of young men and women will miss out on quality higher education. Statistics for years 2016 to 2018 indicate that those who obtained grade C+ the minimum university entry requirement, averaged only 14 per cent of the total candidates (MOE Nairobi Province Education Board, KCSE results analysis, 2018). This is in sharp contrast to the annual increase in examination candidature. The number of candidates scoring low grades continued to raise concern, as the number of those who did not make the cut-off grade was still high. In 2017, the number of those who scored C+, was 70,073 (11.38%) compared to 88,929 (15.41%) in 2016. In 2018, a minimal improvement was noted with 90,377 out of the slightly over 600,000 attaining C+ (13.77%). More than half of the candidates (313,057) scored below D, with more than 30,840 of them only managing the lowest grade, E.

Studies conducted locally have identified various elements that influence academic achievement of students. These causal elements can be classified into two categories: students' surroundings and personal factors. Students' surroundings

could be home or school related (Otanga, 2016; Kariuki, 2017). A second set of research studies has looked into ways in which academic achievement is affected by students' individual circumstances (Mutweleli, 2014; Munanu, 2016; Mutua, 2018). However, few, if any, have focused on how students' risk taking behaviours may influence their academic achievement. This therefore, made the current study necessary so as to address the current failure rate and to put in place timely interventions.

Significance of the study

It is envisaged that the results of this research may provide additional literature on factors that predict academic achievement, hence become a point of departure for future educational psychology research.

II. THEORETICAL FRAMEWORK

Adolescent Egocentrism Theory (Elkind, 1967)

Elkind (1967) advanced Jean Piaget's (1958) theory of cognitive development, which proposed that most adolescents are at the formal operational stage of development. This is the point where the adolescents can think abstractly and logically. However, even with the enhanced cognitive abilities and awareness to cope with varied emotional states, many adolescents fail to effectively control their emotions. Their thinking is limited by adolescent egocentrism. This, therefore, makes adolescence a period of high vulnerability to negative outcomes (Bartolome et al. 2016).

The theory proposes two specific but related constructs; imaginary and personal fable. Personal fable gives them a sense of invulnerability which in most cases is related to risk taking behaviour. It makes adolescents experience a sense of false immunity to any form of danger. This feeling is partly responsible for their involvement in risky behaviour. The theory is relevant to the current study due to the fact that the sample comprises students within adolescence stage. It is also envisaged that those able to apply their ability to think abstractly and logically, may cope better with their emotional states hence avoid risky behaviours that may influence academic outcomes negatively. Previous studies in educational psychology have found a relationship between risk taking behaviour and academic achievement (Chireshe and Malahlela, 2015; Ngware et al. 2016 and Gremmen et al 2018).

III. REVIEW OF RELATED LITERATURE

Previous studies on students and adolescent behaviour suggest that risk behaviours are associated with various outcomes. However, few have addressed association between risk taking and educational outcomes (Blair, 2017). Using 210 high school students in Southeast Michigan, Scalucci (2018), used examination grades and self-report questionnaire to investigate a combination of social and cognitive variables. The study findings reported a negative and significant correlation between risk taking behaviours and academic

achievement. Although data collection tools in the two studies were similar, there is a notable difference in location. The current research will make way for comparability of results as well as the differences in culture.

In a correlational research study, Hill et al. (2012) investigated early adolescence adjustment and risk behaviour. The study sample was 248 (117 males, 131 females) 7th grade students with an average age of 13 years, drawn from a Midwestern suburban middle school. The results revealed a high correlation between danger invulnerability and risk behaviour while interpersonal invulnerability correlated with adjustment outcomes but negatively with depressive symptoms. General invulnerability positively predicted wellbeing. However, the relationship between the specific domains of risk taking behaviour and academic achievement, a major objective in the present study, was not investigated. Additionally, the sample used was small and this may interfere with the results reliability. The current study used a larger sample which provides a smaller margin of error hence higher reliability.

In Netherlands, a longitudinal study using a sample of 1,219 7th and 9th grade adolescents with a mean age of 14 years, Gremmen et al. (2018) studied adolescents' friendship academic achievement and risk behaviours. The study's concern was to establish the extent to which risky behaviours during adolescence affect academic achievement. Results indicated that risk behaviours negatively affected academic achievement. The current study was necessary as it was conducted in a different location which allowed for cross-cultural differences. In addition, the correlational method used, was likely to minimize threats that are related to time because data from participants is collected just once.

A related research study using a sample drawn from adolescent Belgian boys, Sevic et al. (2019) investigated the relationship between use of sexually explicit materials (pornography) and academic outcomes. The longitudinal study was conducted with two cohorts made up of Croatian male adolescents aged 16 years on average. Path analysis was used to explore the target association following original study. A structural Equation Model analysis failed to show any variation in the academic achievement of students for both cohorts. The conclusion therefore, was that the academic achievement of boys in mid adolescence has no relation with their exposure to pornographic material. The current study examined risk taking behaviour as a predictive factor of academic achievement. The sample was of a similar age group. Nonetheless, there was a difference in terms of participants' cultural background, and data analysis methods used. Therefore, this makes it possible to compare findings based on cultural differences and data analysis method.

Another study by Shukla and Monga (2016), aimed at exploring effects of risk taking on academic achievement using 40 students aged between 15 and 17 years of age in South Delhi India. Results indicated that risk taking behaviours correlated significantly with academic

achievement. Additionally 100% of the girls were categorized as moderate risk takers while 20% of the boys were high risk takers.

In a school based cross-sectional study, Birhanu et al. (2012), investigated the high prevalence of substance use, and associated factors. The sample was drawn from secondary school students in Ethiopia. Results showed that among other factors, low perceived risk of harm in substance use, and low academic achievement were highly associated. Although, the study used a sample of students in their adolescence like in the current one, the methodology used and cultural setting of participants were different Therefore, another study using a different method and in a Kenyan setting was necessary so as to allow for comparison.

In-depth interview method of data collection was used by Chireshe and Malahlela (2013), to explore educators' perception of the effects of teenage pregnancy (risk behavior) on the behavior of students in Secondary schools within South Africa. The results revealed that low academic achievement and teenage pregnancy are significantly related. However, there was a limitation in terms of the small sample size used which limited generalization of study findings. The current researcher used a self-report questionnaire, with a larger sample of participants drawn from secondary schools to create room for comparison and wider generalization. A related study in Kenya by Ngware et al. (2016) investigated the moderated effect of risk behaviour on academic achievement. Results showed a strong mediation effect between academic achievement and risk taking behaviours.

IV. METHODOLOGY

Research Design

Data was collected using correlational research design. It is deemed appropriate when the purpose is to assess the relationship between or among two or more psychological variables (Creswell, 2018). Consequently it was found suitable for this study whose major objective explored the correlation between risk taking and academic achievement. The design entails collection of two or more sets of data so as to test the correlation among them. Furthermore, correlational research is useful in trying to make predictions on behavior. The relationship among the predictor variable in the current study can only be examined for prediction purposes hence the research design.

Locale of Study

Nairobi County, Kenya, was the location of study. It is Africa's 14th largest city. The estimated population is 6.54 million people from diverse backgrounds. It is also the capital city of Kenya occupying approximately 696.1 square kilometers. This makes it the largest city in the country with 17 administrative sub-counties. Counties that border Nairobi are Kiambu, Kajiado and Machakos. The population consists of people who are either employed or self-employed. The cosmopolitan nature means that there is a wider representation

of all types of students from all over Kenya than any other county. The accessible population was 31,420 Form Two students, 2019.

Sampling Techniques

The procedures used to select participants included; purposive sampling, stratified sampling plus simple random sampling. Through purposive sampling, Nairobi County and Form Two class were selected. Purposive sampling allows for the researcher to obtain a sample with required characteristics according to study objectives (Kothari, 2013). To achieve a more desired representation, stratified sampling was used to place schools into four strata; girls' boarding, boys' boarding, co-educational day and boys' day. Two boys' boarding schools, two boarding schools for girls, three day schools that were also co-educational, and one boys' day school were picked through simple random sampling method. In total, eight schools took part in the study. Participants from each stratum were picked using simple random sampling method. This type of sampling was applied in order to give each participant proportionate opportunity of inclusion in the sample (Creswell, 2018).

Research Instruments

The study used a self-administered questionnaire, and pro forma summary for students' examination results. According to Kothari (2013), the questionnaire is a convenient tool of collecting data in survey studies because it is easy to administer particularly when large samples are involved. She also opines that a well-designed questionnaire can yield dependable and reliable findings. The study used a risk taking adopted scale.

Questionnaire

a. Adolescent Risk Taking Scale

Adolescent risk taking was measured by use of the Adolescent Invulnerability Scale (AIS) (Lapsley & Duggan 2001): A revised version. The scale has 21 items divided into three subscales: general invulnerability with 9 items, danger invulnerability and interpersonal invulnerability which had 6 items each. According to Lapsley and Duggan (2001), each factor and total AIS scale reported a strong internal consistency .83. Pilot study results ranged between .57 and .74. The scale was therefore found suitable for the study.

b. Pro forma of students' Examination Results

Academic achievement scores were obtained from academic records in the various schools and recorded in Academic Achievement Table. T-scores were then obtained from the standardized scores to enable comparability among participants from the various schools. The scores were categorized into low, average and high levels of academic achievement. Grades are a strong way of presenting data as well as cost effective. Other researchers have used it in related studies with positive outcomes (Mutweleli, 2014: Otanga, 2016: Ng'ang'a, 2019).

Data Collection

The questionnaires were administered by the researcher at the convenience of participants as advised by the respective administrations in each school. Informed consent from participants was sought prior to data collection. Instructions on how to correctly fill the questionnaires were carefully given by the researcher. Form Two class teachers were requested to assist in the exercise and to also avail records of students' academic achievement. This was to enable the researcher access each participant's scores for mid-term and end of term one examination.

Data Analysis

Descriptive and inferential statistics were applied to analyse data. The quantitative data was first obtained then coded for statistical analysis using the Statistical Package for Sciences (SPSS), version 21. Demographic information of participants was given using descriptive statistical procedures while hypotheses were subjected to inferential statistical procedures for testing at a = .05 level of significance. Data analysis was guided by the following null hypothesis:

H_{01} There is no relationship between risk taking and academic achievement. Statistical Test: Pearson's Product Moment Correlation Coefficient.

V. FINDINGS

General and demographic information

General information

The total number of questionnaires provided to participants was 914. Of these, 748 were collected, translating to an 82% return rate. 56.5% or 417 males, 43.2% or 319 females and 0.3% or 2 'no response'. Tabulation of actual sample size used in the study is shown in Table 1.

Table 1. Participants' Return Rate

TOS	Target Return rate			Actual Return Rate		
	B	G	Total	B	G	Total
BB	324	-	324	251	-	251
GB	-	234	234	-	217	217
COED	168	127	295	105	102	207
BD	61	-	61	61	-	61
NR						2
Total	553	361	914	417(57.08)	319(42.64)	738 (100)

Note: TOS= Type of School; BB=Boys Boarding; GB=Girls Boarding; COED=Co-educational Day; BD= Boys' Boarding; NR=No Response; B = Boys: G = Girls

Table 1. Distribution of Participants by sex

Sex	Frequency	Percent
Male	417	56.5
Females	319	43.2
No response	2	0.3
Total	738	100.0

Note. N = 738

As presented in Table 2, a larger portion of participants 417 (56.5% were males, while 319 (43.2%) were females. 2(0.3%) did not respond. A possible reason for the sex variation could be attributed to irregular spread of male and female students in the sampled schools.

Descriptive statistics for Participants' Risk Taking

The sum total of scores obtained by the participants in the complete risk taking scores were used to establish the participants' level of risk taking and to calculate the means and standard deviation. The mean scores obtained from Form Two mid and Term one examination results 2019 were used to represent academic achievement levels. The findings are summarized in table 3.

Table 3. Participants' Levels of Risk Taking

Levels of RT	Frequency	*M*	*SD*	*Sk*	*Kur*
Low level of RT	321 (43.5)	54.33	10.83	-0. 06	0.50
Moderate level of RT	390 (52.8)				
High level of RT	29 (3.7)				
Total	738 (100)				

Note. N=738; M = Mean; SD = Standard Deviation; Sk = Skewness; Kur = Kurtosis; RT = Risk Taking

Table 3 revealed that a majority, over half of the participants had a moderate level of risk-taking score. Slightly less than a half of the participants had a low level of risk taking score while less than a quarter were in the high level of risk taking category. The mean score was 54.33 (SD =10.83) indicating that on average, the participants had a moderate level of risk taking. Coefficient of skewness was -0.06 and this implied that most of the participants rated themselves highly on risk taking, while the value of the kurtosis was 0.50 suggesting that the risk taking scores were normally distributed. Participants' scores on risk taking were subjected to further analysis to calculate the descriptive statistics for each subscale.

Descriptive Analysis of participants' Academic Achievement Scores

The participants' examination results at end of term one, were transformed first into Z-score then into T-score. Scores for participants' academic achievement are shown in Table 4 following the descriptive analysis.

Table 4. Descriptive Analysis of Participants' Academic Achievement

N	Range	Min	Max	M	SD	Sk	Kur
738	49	26	75	52.36	9.69	-.41	-.26

Note. N=738   Min = Minimum; Max = Maximum; M = Mean; SD = Standard Deviation; Sk = Skewness; Kur = Kurtosis

As observed in Table 4, the range was 49, meaning that the lowest academic achievement score was 26, while the highest was 75. The mean score was (52.36 *SD* 9.69), indicating that on average, the participants had a moderate level of achievement. The results suggested a skewed and negative score indicating a high performance in majority of students probably due to the participants' level of emotional self-regulation where majority had moderate rating. The academic achievement scores were of a normal distribution as implied by (-.41) kurtosis score. Initially, scores had first been converted to T-scores (*M* = 50, *SD* = 10) which were then used to place participants' in categories. The categories ranged from low, average through to high. Low achievement category fell between 26-42, average 43-59 and high at 60-75 range. Additional analysis was performed to determine the participants' distribution across categories. Table 5 presented the results.

Descriptive Analysis of Academic Achievement

The participants' examination results at end of term one, were transformed first into Z-score then into T-score. Scores for participants' academic achievement are shown in Table 5 following the descriptive analysis.

Participants' levels of Academic Achievement

Table 5. Participants' Levels of Academic Achievement

Academic Achievement	Frequency	%
Low	128	17.3
Average	421	57.0
High	189	25.6
Total	738	100.0

Note. N = 738

Table 5 reveals that over half of participants were in the average level category of academic achievement. Approximately, a quarter of participants were in the high academic achievement category, while less than a quarter were in the low academic achievement category. This implies that a greater number of participants were in the average category of academic achievement.

Hypothesis Testing

The following null hypothesis was tested in order to determine the relationship between risk taking and academic achievement:

$H_{01:}$ There is no significant relationship between students' risk taking and academic achievement.

Pearson Product Moment Correlation Coefficient was used to conduct a bivariate analysis of correlation to test this hypothesis. The following figure shows the finding:

Correlation between Risk Taking and Academic Achievement
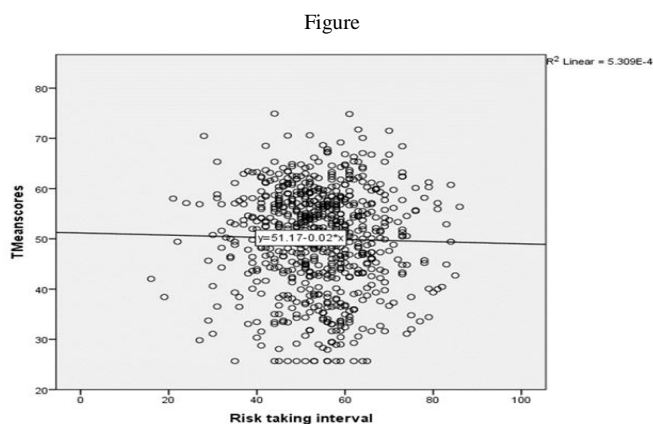
Figure

The scatter plot in Figure 1 shows evidence of a linear relationship between risk taking and academic achievement. It was a weak relationship at (R^2=5.3%). This implied that students' risk taking behavior explained the 53% variation in academic achievement. Higher scores in the risk taking variable correlated with lower scores in the academic achievement variable (y=51.17-0.02x). The researcher decided to run a Pearson Product Moment Coefficient (r) to test significance of the correlation. The results of the Pearson Product Moment Correlation coefficient between risk taking and academic achievement are shown in table 6.

Table 6. Correlation between Risk Taking and Academic Achievement

Mean score	Risk taking	Pearson Correlation
	Sig. (2-tailed)	-.03
	N	.40

Note. N = 738

Results in Table 6 indicate that there was a weak negative relationship between risk taking and academic achievement, r (738= -.03, $p > 0.05$, a relationship that was not statistically significant. Based on these findings, the null hypothesis was thus retained. The conclusion therefore was that, there was no significant relationship between risk taking and academic achievement. A further analysis was conducted on individual subscales of risk taking to determine if they related significantly to academic achievement. To achieve this, three supplementary null hypotheses were drafted:

$H_{01.1}$: There is no significant relationship between students' general invulnerability and academic achievement.

$H_{02.2}$: There is no significant relationship between students' danger invulnerability and academic achievement.

$H_{02.3}$: There is no significant relationship between interpersonal invulnerability and academic achievement.

Table 7. Correlations between Subscales of Risk Taking and Academic Achievement

		General Invulnerability	Danger Invulnerability	Interpersonal Invulnerability
Mean score	Pearson Correlation	.01	-.04	-.04
	Sig. (2-tailed)	.83	.24	.24
	N	738	738	738

Note. N=738

As shown in Table 7, among the three subscales of risk taking, only general invulnerability was positively related to academic achievement, a relationship that was weak and statistically non-significant r (738) = .01, $p > 0.05$. However, the relationship between danger invulnerability and academic achievement was found to be statistically non-significant at r (738)) = -.04, $p > 0.05$. Similarly, interpersonal invulnerability had a weak negative relationship that was statistically non-significant r (738) = -.04, $p > 0.05$. The supplementary null hypotheses were therefore retained, based on the test findings. The implication here is that the three levels of risk taking did not significantly relate to academic achievement. This could therefore imply that, other factors not investigated in the current study may be contributing more towards the low academic achievement of students. Additionally, even those who do engage in risky behaviors, such behaviors do not adversely affect their learning. Further, even for general invulnerability, which correlated with academic achievement, the relation was quite minimal. It is worth noting that general invulnerability is about a student's feeling vulnerable from psychological distress.

These findings are contrary to Elkind's Adolescent Egocentrism Theory (1967) that guided this study. The theory had hypothesized that adolescents entertain personal fable that gives them a sense of invulnerability which in a number of occasions is related to risk taking behavior. This behavior, in most cases is likely to interfere with adolescent students' concentration in school work, thereby affecting their academic achievement.

VI. DISCUSSION OF THE RESULTS

The objective of the study was to establish how students' risk taking related to academic achievement. A negative and statistically non-significant correlation was found as shown in Table 6. Correspondingly, the two domains of risk taking (danger invulnerability and interpersonal invulnerability) revealed a negative relationship to academic achievement while in the general invulnerability, a weak positive relationship that was statistically non-significant was found.

However, the findings are contrary to most previous studies which showed that risk taking is significantly related to academic achievement. The results by Sevic et al. (2019) reported that students' behaviour of watching pornography (risk behaviour) related negatively with academic achievement. The study sample included Belgian boys who

were in their adolescence using two longitudinal samples. The results are also consistent with those of a study conducted by Blair (2017) among American senior high school students, that risk taking behaviour in girls did have a negative association with academic achievement.

The finding contradict those of a study by Gremmen et al. (2018) who investigated adolescents' friendships, academic achievement and risk behaviours among 14 year old adolescents in Netherland. The longitudinal study reported a negative relationship between risk behaviours and academic achievement. Similar results were reported by Scalcucci (2018) using high school students from South Michigan. Risk taking behaviour was found to be negatively correlated to academic achievement. Similar results were reported by Scalcucci (2018) using high school students from South Michigan. Risk taking behavior was found to be negatively correlated to academic achievement.

Another finding by Shukla and Monga (2016) reported that risk taking behaviors were significantly correlated to academic achievement. Birhanu et al. (2012) studied high school students in Ethiopia and found a significant relationship between substance use (risk behavior) and academic achievement. This was corroborated by Hill et al. (2012), who found the risk taking subscales (danger, general and interpersonal invulnerability) highly related to negative outcomes.

The results were also not in line with those reported by Chireshe and Malahlela (2013) who explored educator's perception of the effects of teenage pregnancy, considered a risk behavior of learners in South African secondary schools. The study, revealed a significant relationship between teenage pregnancy (considered a risk behavior), and academic achievement.

Other results by Gremmen et al. (2018) who studied adolescents' friendship, academic achievement and risk taking behaviors revealed that risk behaviors negatively affected academic achievement. Similarly, a positive relationship between behavior that was considered risky and academic performance/ achievement was reported by Ngware et al. (2016). The study consisted of girls in their adolescence living in Nairobi urban slums. These findings echo the sentiments of Ostegargren and Agarth (2014) who held the opinion that risky behaviors are associated with low academic achievement.

In conclusion, it was interesting to note that the findings are contrary to Elkind's Adolescent Egocentrism Theory (1967) that guided this study. The theory postulated that, adolescents generally experience a sense of false immunity to any form of danger. In fact, the study results indicate that most of them are aware of their vulnerability to psychological, physical and social threats. According to the results, only a small minority indicated feeling immune to various forms of danger.

VII. CONCLUSIONS

The objective was to examine the correlation between students' risk taking behavior and academic achievement. Based on findings from previous studies, it was expected that risk taking and academic achievement would have a negative correlation. However, no significant relationship was found in this regard. Results showed a negative statistically non-significant relationship between the two variables. Among the three sub-scales of risk taking, two of them, danger invulnerability and interpersonal invulnerability also revealed a negative statistically non-significant relationship with academic achievement. However, the general invulnerability subscale correlated positively but non-significantly with academic achievement.

In conclusion, it was interesting to note that the findings are contrary to Elkind's Adolescent Egocentrism Theory (1967) that guided this study. The theory postulated that, adolescents generally experience a sense of false immunity to any form of danger. In fact, the study results indicate that most of them are aware of their vulnerability to psychological, physical and social threats. According to the results, only a small minority indicated feeling immune to various forms of danger.

VIII. RECOMMENDATIONS

Policy Recommendation

The objective aimed at establishing the association between risk taking and academic achievement. A negative association that was statistically non- significant was revealed. The Ministry of Education through Kenya Institute of Curriculum Development (KICD) could enhance life skills curriculum to help equip students with relevant skills. Such skills will enable students manage to completely and safely navigate through risky experiences, concentrate in school work, promote their general wellbeing and academic achievement.

Recommendation for Further Research

The study was conducted in one urban county and with Form Two students which makes up a small sample. Thus, the results may only be generalized to other Kenyan students and schools with caution. It is recommended that similar studies be conducted in different locations and with students at other levels of maturity such as Form One, Three, Four and university/colleges. This will assist in the control of environmental and level differences.

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