



RELATIONSHIP BETWEEN MANIFESTATION OF SYMPTOMATOLOGY AND PSYCHOLOGICAL ADJUSTMENT OF THE SURVIVORS OF ARSON ATTACKS IN HIGH SCHOOLS IN NAIROBI COUNTY

Lusambili M¹., Nyaga G.,² Kimamo C.,³ Muthami J.⁴

1. University of Nairobi, School of Arts Department of Psychology University of Nairobi. P.O. Box 30197-00100, Nairobi, Kenya
2. University of Nairobi, School of Arts Department of Psychology University of Nairobi. P.O. Box 30197-00100, Nairobi, Kenya
3. University of Nairobi, School of Arts Department of Psychology University of Nairobi. P.O. Box 30197-00100, Nairobi, Kenya
4. University of Nairobi, School of Arts Department of Psychology University of Nairobi. P.O. Box 30197-00100, Nairobi, Kenya

ABSTRACT

Arson attacks in high schools occur throughout the world. They are traumatic events and leave survivors with trails of psychological trauma, which impair their mental health wellness and functioning. In order for the survivors to return to normalcy, they will need psychological adjustment. The primary objective of the research was to determine the relationship between safety awareness, preparedness and manifestation of symptomatology. This research adopted a descriptive survey design to execute it. Snowball sampling technique was applied. The study population will comprise of high schools including students. The study used self-administered questionnaires for students to collect data. Quantitative data was analyzed by descriptive statistics and inferential statistics then statistical package for social sciences. Hypothesis was analyzed by Pearson product moment, Correlations (r) and step wise regression technique. Qualitative data from open ended questions were read, paying attention to ideas, documents and concepts from respondents. Field notes were edited and written based on content and theme and analyzed accordingly. The study adopted social support theory. The theory states that the support an individual survivor receives from the social networks boosts the individual survivors' resilience and promotes health wellness and psychological adjustment. There is a relationship between social support and individual health. The outcome of the study will have implications on policy and theory. On policy the study helped to identify gaps in the current understanding of arson survivors in schools and will assist education planners, administrators and those responsible for education in formulation of adequate policy framework.

Key words: Safety Awareness, Preparedness, Management of Symptomatology, Arson Attacks

INTRODUCTION

Traumatic events such as arson attacks manifest in symptoms and signs among survivors: Physiological effects of arson attacks include high blood pressure, collapse of immune system which lessens the ability to fight off diseases in the body, such as, blood pressure and several infections. Psychological experiences may include lack of motivation, lack of commitment and, depression among other experiences. Behavioral consequences among other experiences may result in absenteeism, eventually may become a school dropout (Guterman, 2005).

Arson attacks in high schools occur throughout the world. They are traumatic events and leave survivors with trails of psychological trauma, which impair their mental health wellness and functioning. In order for the survivors to return to normalcy, they will need psychological adjustment

(Seaton, 2009). In USA, for example from 2009 to 2011, the country experienced a total of 12,000 arson attacks. (SA Fire Administration, 2016). In similar studies in U.K and Wales from 2007-2009 one in 8 high schools suffered arson attacks (Wade et al., 2007). Investigative criminal profiling of social arson crimes in Australia identified that, arson attacks in high schools had doubled (Kocsis and Cooksey, 2002). In Asia, India was singled out due to frequent arson attacks experienced in high schools. In Kashmir province, for example, more than 4000 students from 47 high schools survived arson attacks. (Wini, 2016) Meanwhile, in Africa the scourge of arson did not spare the Continent as studies in some of the countries demonstrated. In South Africa, 20 high schools were burnt down on May 6, 2016 in Limpopo province (Kahwa, 2016). The researcher further conducted a survey of arson attacks in schools in Tanzania, Uganda, Kenya and Nigeria and summed up that they represented a cross section of Africa (Kahwa, 2016).

Statement of the Problem

High schools in Kenya have continued to experience arson attacks which began at Maseno School in 1908. More than 100 years ago to date, a solution to this scourge is yet to be found. Moreover, nothing is known about several survivors who tried to make their lives sufferable. Arson attacks are traumatic events which leave survivors, most of them youths, to experience manifestation of symptomatology, which is debilitating to an individual survivor. However this, may go away or linger for a long time and it impairs mental health wellness and functioning. Those survivors needed psychological adjustment in order to regain their normal mental health wellbeing and functioning (Seaton, 2009).

This study targets the survivors and the uniqueness of the months of June and July, 2016 when arson attacks were sporadic and unprecedented in the history of Kenya. In two months alone, more than 130 high schools were set on fire. The stakeholders were overwhelmed and shaken. The severity and the frequency of the fires attracted national debates, with local communities and other stakeholders searching for causes of the fires and solution to the menace that left thousands of survivors with psychological trauma. This problem has stained the image and integrity of the entire education sector, by and large, the whole country. Arson attacks cost the economy millions of shillings on repairs, relocation of survivors to other facilities, replacement of destroyed items, insurance costs and reconstruction. During the disturbances, no learning in schools takes place and the schools suffer loss of goodwill. However, the psychological consequences on survivors may not be apparent immediately. (Natural Crime Research Center, 2016).

The Goal and Objectives of the Study

The purpose of the study is to determine the assess relationship between manifestation of symptomatology and psychological adjustment of the survivors of arson attacks in high schools in Nairobi County.

LITERATURE REVIEW

Safety awareness and preparedness, manifestation of symptomatology and psychological adjustment.

When a disaster occurs, there may be deaths but survivors will experience manifestation of symptomatology (Tertullian, 160-200). While agreeing with the philosopher, the author of emergency theory noted that, how well one is prepared for possible arson attack, will have a bearing on the recovery of survivors. It is also a strategy for resilience and subsequently, psychological adjustment (Jensen, 2010). De Wolf (2004) conducted a study in America (USA) on mental health response to mass violence and terrorism while, Guterman (2005) conducted studies in Canada on psychological preparedness for disaster, independent of Dewolf (2004). Each established that survivors of traumatic events will manifest psychological trauma. They will also require psychological adjustment in order to

regain normalcy as explained, inter alia. Safety awareness and preparedness measures in high schools can offer, not only an assurance on safety or security, but also provide some kind of buffer between students, staff and the trauma caused by arson attacks (Kipngeno and Kyalo 2009).

Theoretical Framework

This study used social support theory. Studies inform us that there is an association between social support theory and individual health (.Sippel et al, 2015 ,Vaux, 1988). This theory by Vaux (1988) gained momentum in the late 1980 and 1990. Social support can stimulate self-esteem. This eliminates manifestation of symptomatology and renders the survivor psychologically adjusted (Seaton, 2009). Individuals can also teach themselves how to reduce strain through relaxation techniques, for example, Saunter, swimming, reading, participating in games, yoga, good sleep, school facilities available for example libraries playing fields, recreation halls, chaplaincy and a conducive environment (Cohen *et al.*, 1985). Social support theory is linked to several courses such as psychology, medicine, sociology, nursing, public health education, rehabilitation, and social work. Social support can come from several sources, among them, friends, government, non-governmental organisations, partners, family, community, even co-workers and church. Unlike General System theory, Von Bertalanffy (1968), if any entity does not function within the system the operation will not collapse. Social support also includes online media in form of social media and is very effective (Wong and Ma, 2016). In a high school setup, this is essential in conveying information in support of survivors' well-being. Social support does not have a cost effect to the beneficiary. The cost of social support sent to the survivor is paid by the supporter or the sponsor (Wang and Ma, 2016). In conclusion, general systems theory, strengths and weaknesses are found in individual components that constitute homeostasis in a whole unit.

Research Hypotheses

The following hypothesis is proposed by the study

- H₁ There is a relationship between manifestation of symptomatology and psychological adjustment of the survivors of arson attacks.

RESEARCH METHODOLOGY

Introduction

This chapter explains the process that was used for conducting the study. The chapter gives a precise description the research design, population Sample, sampling techniques and sample size, the methodology of data collection and analysis and the reliability measures used for the study.

Research Design

This research is a case study and applied a descriptive survey design to execute it. The survey design helped the researcher to meet the study objectives by collecting, measuring and analyzing data. The design used the description to organize data into patterns that emerge during analysis. This analysis is the form of the structure of the research and availability of diverse information (Orodho, 2013). The researcher will conduct a survey to establish the relationship between safety awareness, preparedness and psychological adjustment of the survivors of arson attacks in high schools in Kenya and also determine the influence that manifestation of symptomatology management of symptomatology and psychological adjustment will have on the relationships. The researcher will prepare instruments or tools for collecting, analyzing and interpreting observed information. This process will conform to the exact systematic nature of the work (Mugenda and Mugenda, 2003). Since the survey will ensure impartial representation of the population of interests, the researcher will not have any control and will not interfere with the result. The researcher will therefore, post only the results of the study.

Population of the study

The population of interest was the form four students who completed their studies towards the end of 2019 in the high schools that experienced arson attacks during the months of June and July, 2016 within Nairobi County. They are a total of 853 students (Table 2.11.2). They were four schools, 2 public boys boarding, 1 private boys boarding and 01 mixed boys and girls public with girls boarding while boys as day students. They were among over 130 secondary schools which experienced arson attacks in Kenya in June and July, 2016. They are accessible and can easily be reached. They are in close proximity to each other for easy monitoring and they were the only schools in Nairobi that suffered arson attacks. It is generally accepted that what is approved in Nairobi will be adopted by other counties. Nairobi hosts the headquarters, relevant departments which give authorisation to conduct the study and relevant organisations from which secondary data can be collected. Nairobi is also a host to fire engines from herself and armed forces and the only city in the country mostly affected by fires (Huang, et al, 2009; National Crime Research Centre, 2016)

Table 1: Total Population of Students

Name And Type Of School	Number of Students	
	Male	Female
Boys High School(Public Boarding)	225	
Boys Boarding (Private Secondary School)	275	
Boys High School(Public Boarding)	185	
Mixed Boys And Girls (Public Girls Boarding And Boys Day)	(168) 114	54
Total	853	

Source: Researcher, 2019

Key:

- 2 public boys' high schools boarding
- 1 private boy's high school boarding
- 1 public mixed boys day and girls boarding school

Sample Design

The table in 3.3 shows selection of a sample of representative value from the entire population of interest. This aspect will suffice the need for efficiency, representativeness, reliability and flexibility. The criteria were based on the type of school, whether it's boys, girls or mixed schools. The schools was drawn from this category as shown in table 3.3 however there was no category from girls school (Gay 1902) With this type of population the recommended sample size range is 10-30% (Mugenda and Mugenda, 2003).

The form four students in the four schools completed their studies towards the end of 2019. This is the target population, consequently, their respective sampling venues and their social networks have changed. Their locations, too, remain unknown and they are hard to reach people. Studies refer to them as "hidden populations" or hidden respondents". In this regard, the researcher will enlist teachers as informants from the respective schools who will help by purposively identifying one or two subjects from each school. The subjects will in turn identify respondents sequentially or in a snowballing fashion. Thus snowballing sampling method was employed for the study. Snowball sampling technique was developed in 1958 (Coleman, 1958-1959). However, the model is non-randomized and non-probabilistic. It contravenes many of the assumptions that support conventional, methods of selections.

Respondent Driven Sampling technique was developed in 1997 by Heckathorn. The method offers better mathematical model when combined with snowball sampling. This helps to convert chain referral methods with results which can be randomized by keeping track of who referred who in the sample. This creates a model of subjects and respondents, social networks as one component. Resistant respondents are replaced in order to achieve representativeness and reports accurately the number. Subjects recruit respondents as a single source (Heckathorn, 1997). Respondent Driven Sampling also combines with network analyses and creates uniform source. This helps the researcher to achieve high statistical value with samples that are gathered using randomized procedures as demonstrated in tables 1 and 2 (Heckathorn (1997) and Mugenda and Mugenda (2003))

Table 2: Sampling matrix for students

Type of School	Number of Students	Sampling %	Sample Size
Public Boarding	225	30	68
Private Boarding	275	30	81
Public Boarding	185	30	56
Mixed Boys And Girls Boarding	168	30	51
Total	853	30	256

Source: Researcher, 2020

The matrix gives a sample size of 256. One Public Boys Boarding High School (sample size 68) will pretest the research instruments, leaving the sample population for the study to be 188. In order to avoid fractions when distributed among schools, the sample population was 189.

Data Collection

Data both primary and secondary was used in the study. Primary data was collected on self-administered questionnaires. A questionnaire will help the respondents to answer questions on safety awareness and preparedness, manifestation of symptomatology management of symptomatology and psychological adjustment which are the variables of the study. In order to explore more unknown thoughts from respondents, the researcher will employ both structured and unstructured questionnaire. For the success of this operation, the researcher will adopt a field study procedure (Mugenda & Mugenda, 2003). Questionnaires for data collection were preferred in this type of research due to time saving are easily dispensed to respondents spread across a large area and are easy to handle. This helps the respondents to attempt to answer every question (Spasford, 2006; Phellas, 2011).

Data Analysis and Presentation

Analysis of gathered information began with editing the questionnaire for accuracy, cleaning and coding. The information will then be entered on the spread sheet and analysed by using Statistical Package for Social Sciences (SPSS). Quantitative data was analysed by applying descriptive statistics, such as frequencies, percentages and measures of central tendency as a technique for closed ended questions. Meanwhile, qualitative data was cleaned and organized into specific codes according to research questions and directives and grouped into various themes from which conclusions was drawn (Yadutta and Ngao, 2006). The researcher applied inference rules to draw out conclusion. For example, the objective was investigated using Pearson product moment correlation(r).

RESULTS AND DISCUSSION

The results were computed to produce percentages, frequencies, mean and standard deviation for efficiency in interpretation. Qualitative analysis was conducted to supplement the quantitative analysis.

Management of Symptomatology (Moderating Effects)

The research desired determination of participants perception on moderating effects as per as management as regards symptomatology on relationship between safety awareness and preparedness and psychological adjustment of the survivors of arson attack in Kenya.

Individual Characteristics

Following respondents' revelation, it was recorded most of them admitted they would never set a fire if annoyed.

Table 3: Individual Characteristics

	N	Minimum	Maximum	Mean	Std. Deviation
I respect others and their property	161	1.00	5.00	1.1739	.57625
I can start a fire if annoyed	160	1.00	5.00	1.3875	.80866
I keep away from drugs and alcohol because they can lead me to start a fire	159	1.00	5.00	1.6289	1.02224
I approach my studies more seriously than others	161	1.00	5.00	1.4099	.75392
In conflict situations I speak my mind	161	1.00	5.00	2.1304	1.26556
I can control my anger	161	1.00	5.00	2.0807	1.18836

Arithmetic mean computed .3876 confirmed this understanding to be accurate. Normal deviation quantifies .8086 manifested consistency with replies emanating from participants. Moreover discerned from the findings most participants indicated they rarely keep away from drugs and alcohol because they can lead me to start a fire. This fact emanated from the arithmetic mean computed 1.6288; whilst normal deviation 1.022 computed 1.6288, whilst normal deviated 1.022 showed minimal deviation out of arithmetic average consideration. In addition, outcome indicated majority of the study participants conceded that they did not ($M=1.4099$ $SD = .7539$) approach studies more seriously than others. Assertion from the results investigation corroborated most participants indication they rarely in conflict situations speak their mind. This was seen true originating out of the average computed 2.1034 as well as normal deviation 1.2656 that demonstrated there was consistency with replies posted by participants. That there was consistency with replies posted by participants. This was seen true following the arithmetic mean measure 2.0807; normal deviation computed 0.1884 showed minimal variation arising out of arithmetic mean value.

Facilities

The study desired to determine the respondents' perception on facilities in management of symptomatology.

Table 4: Facilities

	N	Minimum	Maximum	Mean	Std. Deviation
School has training on fire prevention	161	1.00	5.00	1.8509	1.13033
School has installed fire protection equipment	159	1.00	5.00	1.6730	1.22989
School has a fence compound	160	1.00	5.00	1.9375	1.38131
School employs a counsellor	161	1.00	5.00	1.5528	1.10057
School has a chaplaincy	161	1.00	5.00	1.1925	.58647
The school provides recreational halls	159	1.00	5.00	1.4654	.84778
The school provides extra-curricula activities	160	1.00	5.00	1.4813	.82395
The school has clubs for students e.g scouting	161	1.00	5.00	2.2609	1.33474

From the descriptive statistics it was established that majority of the study participant indicated ($M=1.8509$ $SD = 1.1303$) the school rarely has training on fire prevention. Also noted from the respondents was that majority conceded that the school rarely has installed fire protection equipment. Views were accepted as accurate following computed mean 1.6730. Meanwhile the normal variation computed 1.2289 showed consistency with replies from participants.

In addition what was discerned from findings revealed most participants indicated school rarely has a fenced compound. Arithmetic means assigned 1.9375 helped to establish the understanding. Normal deviation recorded 1.3813 showed minimal deviations from average point. Similarly it was observed from the result most of the responders conceded that the school rarely employed a counsellor ($M=1.5528$ $SD=1.1006$). It was declared from the results most participants indicated the school did not have a chaplaincy. This understanding was derived from arithmetic mean measure 1.925 and normal deviation .5865 showed there was consistency with replies originating from participants.

The study further established most participants indicated the school did not provide recreational halls. Acceptance of this position as describable was prompted by arithmetic average mean 1.4813. Normal deviation measures 0.8478 and showed consistency in replies received from participants. Furthermore, finding's indicated consistency with replies given by the participants. It was observed in the findings, most participants accepted the school did not provide extracurricular activities. This corroborated the result of the arithmetic mean 1.4813. Normal variation of 0.82395 showed consistency with replies given by the participants. The study further observed consistency in their resolve the school rarely has clubs for students. This seemed accurate by the arithmetic average computed 2.2609. Normal variation measured 1.3347 demonstrated consistencies with replies given by participants.

This was established from the mean calculated of 1.9375. The standard deviation calculated of 1.3813 indicated there was little deviation from the mean mark. Also noted from the findings was that majority of the respondents conceded that the school rarely employed a counsellor ($M=1.5528$ $SD = 1.1006$). It was asserted from the findings that majority of the respondents indicated that the school did not have a chaplaincy. This was seen from the mean calculated of 1.1925. The standard deviation .5865 indicated that there was uniformity in the responses from the respondents. The study also established that majority of the respondents indicated that the school did not provide recreational halls. This was seen true by the mean calculated of 1.4813. The standard deviation calculated of 0.8478 showed that there uniformity in the responses from the respondents. Also noted from the findings, was that majority of the respondents conceded that the school did not provide extra curricula activities. This was seen true by the mean calculated of 1.4813. The standard deviation calculated of .82395 showed that there was uniformity in the responses from the respondents. The study also noted that majority of the respondents noted that the school rarely has clubs for students. This was seen true by the mean calculated of 2.2609. The standard deviation calculated of 1.3347 indicated uniformity in the responses from the respondents.

Religion

The research desired to find out participants perception with religion in management of symptomology

Table 5: Religion

	N	Minimum	Maximum	Mean	Std. Deviation
I attend religious services and activities frequently to gain voluntary control of my behavior to avoid setting fire	161	1.00	5.00	1.6211	.95488
I read my spiritual sacred book to avoid misbehavior which can lead to setting fire	161	1.00	5.00	1.7888	1.16410
I pray to God to help not set fire in school	159	1.00	5.00	1.4403	1.03478
My spiritual life helps to manage stress	161	1.00	5.00	2.3540	1.37573
I can only set school on fire if annoyed by students	161	1.00	5.00	1.5466	.85110
I can only set school on fire if annoyed by teachers	161	1.00	5.00	2.3602	1.31126

From the descriptive statistics it was established that majority of the study participant indicated ($M=1.6211$ $SD=.9549$) they attend religious services and activities frequently to gain voluntary control of their behavior to avoid setting fire. Also noted from the respondents was that majority conceded they rarely read their spiritual sacred book to avoid misbehavior which could lead to setting fire. Evidently it became credible out of arithmetic average measure 1.789. Normal deviation 1.164 showed consistency with replies given by participants

Moreover recorded out the findings, most participants indicated they never prayed to God to help not set fire in the school. The assertion came about due arithmetic mean measure 1.4403. Normal deviation measuring 1.03348 minor deviations existed arising from the arithmetic mean point furthermore recorded in the outcome majority of the respondents conceded that their spiritual life rarely did help manage stress ($M=2.354$ $SD=1.376$). And this came about as a result of the findings most participants indicated rarely can the set the school on fire if annoyed by students. The assertion was aided by arithmetic mean measure 1.5466. Normal variation measures .8511 showed there was consistency with replies provided by participants. The study furthermore established most participants undisclosed they can rarely jet the school if annoyed by teachers. This became factual following arithmetic mean measure 2.3602. Normal deviation measured 1.311 showed consistencies with replies supplied by participants.

Community Support

The study sought to establish the respondents' perception on community support in management of symptomatology.

Table 6: Community Support

	N	Minimum	Maximum	Mean	Std. Deviation
How often do you get money when in need	161	1.00	5.00	1.5901	.91837
I receive help and advice from my community	161	1.00	5.00	2.1739	1.27262
How often do you see the community you come from?	159	1.00	5.00	1.6101	1.13579
I receive advice from my community regarding school	161	1.00	5.00	2.0932	1.35463
When I ask the community questions its glad to receive them	160	1.00	5.00	1.2750	.85377
My community listens to me	161	1.00	5.00	1.6335	1.12744
Valid N (listwise)	158				

Investigation of the outcome determined most study participants indicated (M=1.5601 SD= .9184) that they rarely get money when in need. In addition respondents recorded most of them conceded they rarely received help and advice from the community. Such understanding was supported by arithmetic mean measure 2.17389. Normal deviation assessment 1.273 showed consistency with replies from participants, In addition it was established out of the findings, most respondent indicated they rarely see the community they come from. It became established out of arithmetic measure 1.6101. Whilst normal deviation calculated 1.1358 showed minimal deviation out of arithmetic mean point. Moreover out of the results, most of respondents conceded that rarely received advice from my community regarding school. (M=2.0932. SD=1.355).

It became asserted out of the result most participants indicated when they ask the community questions it's never glad to receive them. Such understanding was observed from arithmetic mean measure 1.2.3.5.0. The standard deviation .8538 indicated that there was similarity in the replies originating from the participants. The study moreover, established that most participants indicated that the community rarely listened to them; such revelation emerged out of arithmetic mean measure 1.6335. This was seen true by the mean calculated of 1.6335. Normal deviation assesses 1.234 showed consistency with answers originating from participants.

Family Support

The study sought to establish the respondents' opinion on family support in management of symptomatology.

Table 7: Family Support

	N	Minimum	Maximum	Mean	Std. Deviation
My family cares for me when am sick	159	1.00	5.00	1.4025	.79651
My family provides material help	161	1.00	5.00	1.4845	1.00066
My family helps me feel loved	160	1.00	5.00	1.4750	.85377
My family is an example in solving my problems	161	1.00	5.00	1.6087	1.10212
My family listens to my problems when I talk to them	161	1.00	5.00	1.3665	.84919
My family follows my progress in school	157	1.00	5.00	1.5414	.94388

In addition respondents observed most accepted their family never provides maternal help. From the descriptive statistics, it was established that majority of the study participant indicated (M= 1.4025 SD = .7965) that their families never cared for them when they were sick. In addition respondents

observed most accepted their family never provides material help; Such move was accepted as credible by arithmetic mean measure 1.4845. While normal deviation showed constancy with answers supplied by participants

Furthermore, findings recorded most participants indicated their families did not help them feel loved. That such establishment measured 1.475 and normal deviation measure .8538 indicated minimal deviation out of the arithmetic mean central point. In addition, observed out of the results, most participants conceded rarely their family is exemplified in solving problems ($M=1.6087$. $SD=1.102$).

It has been declared out of the results of the investigation most participants indicated their families do not listen to their problems when they talk to them. That assertion came about as a result of the arithmetic mean measure 1.3665 and a standard normal deviation 0.8492 indicates there was a constancy of replies originating from participants. The study moreover established most participants indicated their family rarely followed their progress in school. That assertion was understood from the arithmetic mean measure 1.5414. Normal deviation computed 0.94388 showed constancy with responses originating from participants. This was seen true following the arithmetic mean measure 2.0807. Normal deviation composed 0.1884 showed minimal vacation assessing out of arithmetic value.

Peer Support

The study sought to establish the respondents' opinion on peer support in management of symptomatology.

Table 8: Peer Support

	N	Minimum	Maximum	Mean	Std. Deviation
I feel my friends often understand me	160	1.00	5.00	1.4438	.77498
I get along well with my friends	161	1.00	5.00	3.2981	1.31741
My peers encourage me when I am down in spirit	161	1.00	5.00	1.6770	.97213
My peers will contribute money to support when I am in need	161	1.00	5.00	1.8882	1.21960
My peers are my counsellors	157	1.00	5.00	1.4713	1.10105
When my friends do not see me they get concerned	161	1.00	5.00	3.3665	1.43914

From analysis of data in the SPSS, It became accepted most respondents indicated ($m=1.4438$ $SD=.77478$) that they did not feel that their friends understood them. Moreover, observed out of respondents most accepted they sometimes got along well with their friends. That became clearer from arithmetic mean measure 3.2981. Normal deviation computed 1.317 showed constancy replies originating from participants. In addition it was observed out of the findings most participants indicated their peers rarely encouraged them when they were down in spirit. That became accepted out of the arithmetic mean measure 1.677. Normal deviation computed 0.97213 indicated minimal deviation away from the mean point

Furthermore, out of the findings, it was observed most participants accepted rarely their peers contributed money to support them when they were in need ($M=1.888$ $SD=1.2196$). That declaration arose out of assessment, most participants indicated their peers are their counsellors. That was clearer originating from arithmetic mean measure 1.4713. Normal deviation computed 1.101 showed there was constancy of replies coming from participants. The research moreover determined most participants indicated sometimes when their friends do not see them they get concerned. That clarity

emerged out of the arithmetic mean measure 3.360. Normal deviation computed 1.439 showed similarity of replies originated by participants.

Bivariate Linear Correlation Analysis

Bi-variate linear correlation analysis the aligning variables was indicated by applying straight-line relationship investigation. The findings are displayed in table 8

Table 5: Bivariate Correlation

		Psychological Adjustment	Manifestation of Symptomatology
Psychological Adjustment	Pearson Correlation	1	
	Sig. (2-tailed)		
Manifestation of Symptomatology	Pearson Correlation	.482**	1
	Sig. (2-tailed)	.000	
	N	161	161

Diagram 4 shows that every independent variable displayed has an effective connection linking both at level of significance 0.01 consequently was incorporated in the investigation. Two variable relationship investigation utilities were presented thus: Management of Symptomatology $\times_1=0.482$.

Manifestation of Symptomatology $X_1 = 0.482$

There exists a sound notable association linking safety awareness and preparedness with manifestation of symptomatology (relationship quantum 0.482).

Inferential Analysis

The research desired to establish the relationship between safety awareness, preparedness and psychological adjustment of the survivors of arson attacks in high schools in Nairobi County.

The factors under investigation was: The regression model was: Manifestation of Symptomatology

$$Y = \alpha + \beta_1 X_1$$

Where;

α = Constant

Y = Psychological Adjustment

X_1 = Management of Symptomatology

Multiple Regression Model Validity

The research tried to find analysis of variance employed to provide relevant regression model. The findings are presented in Table 9.

Table 6: Model Validity

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1.576	1	1.576	38.801	.000 ^b
	Residual	6.519	159	.041		
	Total	8.095	160			

a. Dependent Variable: Psychological Adjustment

b. Predictors: (Constant), Management of Symptomatology

The study endeavored to assess relevant model if the model was considered logical or not at all. The F statistics was used to determine the model validity. The study found out that the model was valid $F_{(3, 160)} = 38.801$, $P < 0.001$. Therefore, this implies that Management of Symptomatology is good in explaining variation in psychological adjustment of the survivors of arson attacks in Kenya.

Multiple Regression Model Summary

The study sought to determine the model's goodness of fit statistics. The findings are presented in Table 10.

Table 7: Model's Goodness of Fit Statistics

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.794 ^a	.630	.614	.202

The coefficient of determination as measured by the R-square (R^2) (63.0%) shows that all the three predictor variables explain 63.0% of the total variation. This implies that the stochastic disturbance error term (ϵ) covers 37.0%.

Multiple Regression Variable Coefficients

The investigation endeavoured to establish the model virtuousness efficaciousness of how well it fits a set of observations the outcomes one shown in diagram 11.

Table 8: Multiple Regression Variable Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.772	.702		3.951	.000
Management of Symptomatology (X_1)	.262	.125	.192	2.089	.039

a. Dependent Variable: Psychological Adjustment (Y)

X_1 was found to be statistically significant and positively related to Y ($\beta_2 = 0.262$, $P = .039$).

Summary of findings

The objective of the study was to determine the desired to establish the correlation between manifestation of symptomatology and psychological adjustment of the survivor of arson attacks in high schools in Nairobi County. The Pearson moment correlation analysis revealed that there is a significant relationship at 0.558 after testing the hypothesis, H3. Thus, the results demonstrated that there was a positive relationship between the variables by adopting person product moment correlation to test the hypotheses

Conclusions

The addition of internal locus of evaluation in the study underscored the creation of awareness among the survivors of this vital inherent and cognitive resource. This helps to influence the manner the survivors think about the traumatic event and how this resource helps them to cope by protecting them from harmful consequences of stress. This cognitive resource is also a lending base for cognitive behavior therapy and helps to overturn negative thoughts during counselling and enhances resilience, leading to psychological adjustment and healing (Cohen et al, 1985). This study embraced interdisciplinary appeal by including other arrears of concern, such as sociology, epidemiology and psychology.

Recommendations

The government is responsible for enacting relevant legislation through the ministry of education that can protect the safety of individuals in the schools as it is responsible for the safety of her citizens. The individual in the school is responsible too for his/her own safety and must be made accountable by signing the relevant regulations on entering the institutions in order to comply with them. In some countries, USA, for example has set the month of September every year for her citizens to rehearse security drills in order to stay alert for a disaster. Moreover mental health directly impacts on the development of the nation and must be given due recognition just like cancer day and others, with appropriate budgetary allocation to train enough psychiatrists and other health workers. Mental health should be destigmatized from the cultural belief of witchcraft. Some cultural practices such as torching houses to ethnic cleanse or exorcise evil spirit in displacing population or mob justice by neck lacing victims, with impunity should be totally banned. Others such as initiation ceremonies of boys into manhood by serving them with alcoholic beverages actually initiate into becoming arsonists.

REFERENCES

- Cameron, J. (2005). *Welsh Government, Welsh Arson reduction strategy 2012-2015*. Retrieved from <https://www.nwales-fireservice.org.uk>
- Cohen, S. and McKay, T. A (1985) Stress, social support and the buffering hypothesis psychological bulletin 98.310-357. *Psychological Bulletin*, 98(2), 310-57.
- Cooper, R.D. and Schindler, S.P. (2003) *Business Research methods*. Boston: McGraw Hill.
- De Wolf. D (2004) *Mental health response to mass violence and terrorism*. Retrieved from <https://www.mentalhealth.samhsa.gov/>
- Kipngeno, R. A and Kyalo W. B. (2009). Safety Awareness and Preparedness in Secondary Schools in Kenya. *Educational Research and Review*, 8, 179-384
- Mugenda .O. and Mugenda A (2003). *Research Methods: Quantitative and Qualitative approaches*. Nairobi: African Centre for Technology Studies Acts.
- National Crime Research Centre (2017): Rapid Assessment of Arsons in Secondary Schools in Kenya – July – August 2016. Nairobi: Government Press.
- Orodho, J. A (2013). *Essentials of Educational and Social Science Research*. *Africa Journal of Industrial Psychology*, 4(1), 64-69
- Seaton, C. L. (2009). Psychological Adjustment: The encyclopaedia of positive psychology. *Developmental Psychology*, 26(3), 494–505.
- Shibutse, P.M China S and Omuterema S. (2011). Causes of fire disasters in Secondary Schools in Kenya. *Journal of Research on Humanities*, 4, 25-32.

- Von Bertalanffy, L. (1968). *Organismic psychology and systems theory*. *Developmental Psychology*, 26(3), 494–505.
- Wade, P, Taeman, D., Golden, S. Wilson R and Woodley (2007). *The impact of school fires; a study of wider economic and social impacts on schools and the local community*. The publications unit, national foundation for educational research, Slough, Berkline
- Yadutta, T and Ngau, P (2004), *Research Design, Data Collection and Analysis. A Training manual for United Nations for regional development, Africa Office*, UNCRD textbook series No.12