

EFFECT OF MENTAL HEALTH EDUCATION ON RISKY BEHAVIOURS AMONG IN-SCHOOL ADOLESCENTS IN CENTRAL SENATORIAL DISTRICT KOGI STATE NIGERIA

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ABSTRACT

Adolescents have been observed to be encountered with ill-health and premature death worldwide because of their engagement in preventable risky behaviours but mental health education has been identified to have the potential to remedy. Mental health education is an intervention programme design to bring about positive mental health among in-school adolescents. Mental health education risky-behaviour inventory ($r = 0.81$) was used on 436 participants for the study. Three hypotheses on effect of mental health education on risky behaviour, religion and 2-way interaction effect on religion among those exposed to treatment and control group) were tested at 0.05 level of significance. Data was analysed with ANCOVA. There were no significant effect between treatment and control groups ($F_{(1,427)} = .83$; $p > .05$), but experimental group obtained higher ($\bar{x} = 34.85$) than control group ($\bar{x} = 34.29$). Also, treatment by religion ($F_{(1,427)} = 2.9$; $p > .05$) was not significant but Christians obtained higher mean score ($\bar{x} = 34.88$; adj. dev. = .31) than the Muslim ($\bar{x} = 34.02$; adj. dev. = .55). 2-way interaction effect of treatment and religion ($F_{(1,427)} = .00$; $p > .05$) was not significant but slight higher posttest score were observed. Therefore mental health education is assumed to be able to effect positive health behaviour and healthy lifestyle among adolescents. Mental health education is suggested for inclusion in secondary school curriculum.

KEYWORDS: Risky Behaviour, In-School Adolescents, Mental Health Education, Religion

INTRODUCTION

Many adolescents who are generally thought to be healthy cannot enjoy healthy life and longevity due to engagement in preventable risky health behaviours. Adolescents have survived the childhood diseases and are not close to the problems associated with ageing but their involvement in risky behaviours has placed them on series of dangers, suffer from ill health and reduced their life span tragically because of preventable health hazards such as substance use, risky sexual acts, unhealthy eating habits, violence, infectious diseases and the over controlled, internalizing or emotional problems like anxiety and unnecessary worry, bulimia and anorexia nervosa. National Institute on Alcohol Abuse and Alcoholism, 2003); World Health Organization, 2008; and Britsch and Olson, 2001) submitted that adolescent is a transitional period from childhood to adulthood when significant changes occur in the body and generally viewed as between ages 10 – 19 years. The rapid hormonal alterations and the formation of new networks in the brain make adolescents to try new experiences and activities that emphasize socializing with peers, and conforming to peer-group standards. The developmental stage is a stormy and stressful period for both parents and adolescents because of the emotional stress resulting from rapid and extensive physiological and physiological changes (National Institute on Alcohol

Abuse and Alcoholism, 2003; World Health Organization, 2008; and Britsch and Olson 2001; NIAAA, 2003; World Health Organization, 2008; and Britsch and Olson, 2001).

The study of Igwe and Ojinnaka (2010), in a cross-sectional study among 900 adolescents selected from 29 secondary schools in Enugu metropolis on the prevalence of psychosocial dysfunction and depressive symptoms among adolescents who abuse substance and the influence of socio-demographic factors and type of substance on the pattern of dysfunction found that a total of 290 students were current substance abusers. Also the World Bank Group Report (2007) and National Center for Chronic Disease Prevention and Health Promotion (2010), revealed that more than a quarter of the world population is between the ages of 10 and 24 and they account for 15% of the diseases and injuries worldwide and over one million die each year, mainly because preventable causes from risk behaviours. National Institute on Alcohol Abuse and Alcoholism – NIAAA (2003); National Center for Chronic Disease Prevention and Health Promotion (2010), reported that nearly 50% of adolescents have had at least one drink, and over 20% “drunk” at a particular time and that approximately 72% of deaths among adolescents aged 10-24 years are attributed to injuries from only four causes which include motor vehicle crashes (30%), all other unintentional injuries (15%), homicide (15%), and suicide (12%). And highly associated with these injuries are adolescent behaviours such as physical fights, carrying weapons, making a suicide plan, and not using seatbelts. Substance use may be associated with an increasing morbidity and mortality among adolescents worldwide (National Institute on Drug Abuse 1998); induce brain damage and contribute to poor performance and likelihood of developing alcohol abuse or dependence later in life especially when started before age 15 (NIAAA 2003; National Center for Chronic Disease Prevention and Health Promotion, 2010).

Not that alone many adolescents are also associated with other health risk behaviours like inadequate nutrition and micronutrient deficiencies whereas they need adequate nourishment for normal growth and developmental progresses. Olanegan (1999); Kurtzweil (2007); Science Daily News (2011), ascertained that an unbalanced diet and micronutrient deficiencies can cause variety of diseases and impair normal functioning of the body which may transcend into adolescent stage and render them unhealthy. But many as 1% of American teenage females, 15 - 19 years of age, are said to suffer from eating disorder and an estimated ten of every 100 teenage girls struggle with either anorexia or bulimia and about 1% of average high school aged girls in the US and England are thought to be affected and emotional eating disorders affect as many as 25-30% of Americans and nearly one in five college students admitted to having suffered from an eating disorder (American Academy of Child and Adolescent Psychiatry 2010; National Eating Disorders Association 2006).

Also, sexual activity among adolescents has increased dramatically coupled with anxiety. The National Center for Chronic Disease Prevention and Health Promotion (2010) confirms that each year, there are approximately 19 million new STD infections, and almost half of them are among youth aged 15 to 24; in 2002, 12% of all pregnancies, or 757,000, occurred among adolescents aged 15-19. David (2010); Goldman (2010) in their study submitted that adolescents with anxiety disorder often worry needlessly and if the anxiety persists, and teenagers who are high in “neuroticism” (negative emotions such as fear, anxiety, guilt, shame, sadness or anger) appear to become unnecessarily anxious in ways that are out of proportion with actual circumstances and may lead to some deleterious health outcomes among children and adolescents, such as increased acute illness and physical symptoms of unhealthy behaviour, substance abuse (cigarette smoking, alcohol consumption, marijuana smoking), and risky sexual behaviour (Gurian 2011).

Many adolescents think that involvement in risky behaviours is key rite of passage from childhood to adulthood. Therefore adolescents need to be equipped with the correct values; skills and behaviour that will make them face these challenges and assist them in making healthy life-style choice in life. Risky behaviours apply to specific form of inappropriate problem handling and they are understood to be behaviours with undesirable consequences that is accompanied by probability of harm or loss and also lead to enduring negative consequences at considerable costs to individuals, families, and the wider community (Amhad, Khalique, Khan and Amir 2007; Hurrddmann and Richter, 2005). Nonetheless, studies in gender interaction show that adolescent girls experience pressure toward more rigid conceptions on gender roles than males about their health. They become more concerned with how women are “supposed to behave” and with their physical and sexual attractiveness. Therefore Fagan (2006) in reference to Regnerus (2001) revealed that boys and girls react differently to same issues and there are consistent gender differences in health behaviours.

As for the ongoing, mental health is a state of the individual’s social and emotional well-being of mind that enables them to realize their potentials work capacity, live a full and creative life and the flexibility to deal with life’s inevitable challenges of thoughts, feelings and actions; feel comfortable with self, relationships and able to cope with demands of life, particularly when faced with life's challenges and stressors and still able to contribute to his or her community (WHO Media Center 2010; World Health Organization 2005; World Health Organization 2008; Moronkola 2003; Fawole 2006). In this regard Funk, Drew, and Robertson (2011), submitted that positive mental health is linked to a range of development outcomes and fundamental to coping with adversity while poor mental health impedes an individual’s capacity to realize his potential but mental health can be improved with effective supportive treatments, prevention and promotion programmes available to all people who need them (Funk, Drew, and Robertson 2011).

Meanwhile, mental health education through schools is assumed to be able to contribute to positive change towards risky health and acceptance of positive behaviours. Mental health education programme is an aspect of the entire health education programme which deals with provision of professionally designed programme for better understanding of the importance of mental wellness and development and maintenance of desirable healthy lifestyles.

Risky health behaviours among adolescents in Nigeria may lead to mental health problems. Poor mental health impedes an individual’s capacity to realize his/her potentials, work productively, and contribute to the community. Experiences from mental health education influence how adolescents feel about themselves, provides supportive and protective factor which adolescents assess for enhancing their health, human potential and provide the choices they make, which can affect their health now and in future. The development of positive behaviours should be emphasized through the teaching and learning process of adolescents to make them realize and utilize their adult potentials effectively. This study therefore, aimed at encouraging the adolescents in Kogi State to acquire and accept adequate mental health education techniques to develop positive health behaviour in life.

Significance of the Study

Most of the adolescents engage in risky behaviours probably because they lack or are not adequately exposed to mental health education literacy. Mental health education is viewed as a means of reducing incidences of risky behaviours among in-school adolescents’ if they are adequately equipped. Based on this the study sought information on the effect of mental health education on in-school adolescents in the Western Senatorial District of Kogi State Nigeria.

Statement of the Problem

Adolescents of secondary schools age in eastern senatorial district Kogi State engages in risky behaviours. These behaviours may include substance use, violence, unsafe sexual acts, anxiety and poor dietary habits. The risky behaviours may be as result of inadequate exposure to the negative effects of the behaviours can have on their life. Risky behaviours can cause health problems such as infectious diseases, psychological problems, heart diseases and probably premature death among adolescents. Despite that, most of these adolescents' problems have been given little attention or completely ignored, with little understanding of the potential effects in adolescents' life, their society and the nation as a whole. Religion was examined as a variable in the study. Suggestions were provided on based on the findings on how to develop positive behavioural change among adolescents' towards positive health development in the Central Senatorial District of Kogi State, Nigeria.

Hypotheses

The following seven hypotheses were generated and tested for the study:

- There is no significant effect in the risky behaviour of in-school adolescents' exposed to mental health education on cigarette smoking, alcohol consumption, marijuana smoking, interpersonal violence, poor eating habit, anxiety, and multiple sex partners and those in the control group.
- There is no significant effect in the risky behaviour of religion (Christian and Muslim) in-school adolescents' exposed to mental health education on cigarette smoking, alcohol consumption, marijuana smoking, interpersonal violence, poor eating habit, anxiety, and multiple sex partners and those in the control group.
- There is no significant 2-way interaction effect of treatment on religion (Christian and Muslim) in-school adolescent exposed to mental health education risky behaviour on cigarette smoking, alcohol consumption, marijuana smoking, interpersonal violence, poor eating habit, anxiety, and multiple sex partners and those in the control group.

METHODS AND PROCEDURE

Pretest-posttest quasi-experimental design was used for the study. The population for this study comprised all coeducational (male and female) public Senior Secondary Schools in Lokoja Kogi State, Nigeria. Four hundred and thirty six (436) 69.64% out of six hundred and twenty six (626) students in senior secondary school II (SSS II) from the four (4) sampled schools were used. Simple random sampling technique was used to select the schools and Micro Soft Excel Rand Function was used to select the participants.

The instrument for the study was Mental Health Education Risky Behaviour Inventory (MHERBI) ($r = 0.81$) which was subjected to face, construct, and content validity. Also Cronbach alpha was used to determine the internal consistency and reliability coefficient at 0.05 alpha level. The reliability score Mental Health Education Risky Behaviour Inventory (MHERBI) was $r = 0.81$. Inter-rater and Scott's π reliability were used to determine the stimulus instrument and the reliability score was $r = 0.69$. Pretest and posttest were administered directly to the participants by the trained research assistants and data gathered were analyzed by inferential statistics of Analysis of Co-variance (ANCOVA). The decision to reject or to accept the hypotheses was set at 0.05 alpha level of significant.

FINDINGS AND ANALYSIS

Ho1

There is no significant effect in the risky behaviour of in-school adolescents’ exposed to mental health education and those in the control group.

Table 1: Summary of ANCOVA of Posttest Risky Behaviour Scores by Treatment and Religion

Source of Variance		Sum of Squares	Df	Hierarchical Method		
				Mean square	F	Sig
Covariates Main Effects	RISKY BEHAVIOUR	3.198	1	3.198	.127	.722
	R (Combined)	93.403	3	31.134	1.233	.364
	TREATMENT	20.875	1	20.875	.827	.092
	RELIGION	72.114	1	72.114	2.856	
2-way Interactions	(Combined) TREATMENT x RELIGION	148.328	3	49.443	1.958	.120
		5.852E-02	1	5.852E-02	.002	.962
Model		247.437	8	30.930		
Residual		10782.911	427	25.253	1.225	.283
Total		11030.349	435	25.357		

Significant of $p < .05$

From Table 1, there is no significant effect of treatment on students’ mental health education risky behaviour ($F_{(1,427)} = .83; p > .05$). This means that there is no significant differences in the adjusted posttest of mental health education risky behaviour mean score of students exposed to the treatment and their counterparts in the control group. On this basis, hypothesis 1 is accepted.

Table 2: Multiple Classification Analysis of Posttest Risky Behaviour Scores By Treatment and Religion. Grand Mean = 34.58

Variable + Category		N	Predicted Mean		Deviation		Eta	Beta
			Unadjusted	Adjusted for Factor and Covariates	Unadjusted	Adjusted for Factors and Covariates		
TREATMENT	Intervention	225	34.8044	34.8458	.2265	.2678	.046	.055
	Control	211	34.3365	34.2924	-.2415	-.2855		
RELIGION	Christianity	281	34.8541	34.8843	.2761	.3063	.074	.082
	Islam	155	34.0774	34.0227	-.5006	-.5533		
R = .094								
R Squared = .009								

Table 2, shows that students in the treatment group obtained slightly higher mental health education risky behaviour adjusted posttest mean score ($\bar{x} = 34.85$; $adj. dev = .27$) than their control group counterparts ($\bar{x} = 34.29$; $adj. dev = .29$). However, this difference is not significant as shown in Table 1.

Ho2

There is no significant difference in the risky behaviour of Christian and Muslim (religion) in-school adolescents' exposed to mental health education and those in the control group.

From Table 1, there is no significant effect of religion on students' adjusted posttest mental health education risky behaviour scores ($F_{(1,427)} = 2.9$; $p > .05$). This means that Christian and Muslim students adjusted posttest mean mental health education risky behaviour score differ significantly. Hypothesis 2 is therefore rejected.

Table 2, however, shows that the Christian students obtained slightly higher adjusted posttest mean mental health education risky behaviour score ($\bar{x} = 34.88$; $adj. dev. = .31$) than the Muslim counterparts ($\bar{x} = 34.02$; $adj. dev. = .55$).

Ho 3

There is no significant 2-way interaction effect of treatment on Christian and Muslim (religion) in-school adolescent exposed to mental health education and those in the control group.

Table 1 shows that 2-way interaction effect of treatment and religion on students' mental health education risky behaviour is not significant ($F_{(1,427)} = .00$; $p > .05$). Hence, hypothesis 3 is accepted.

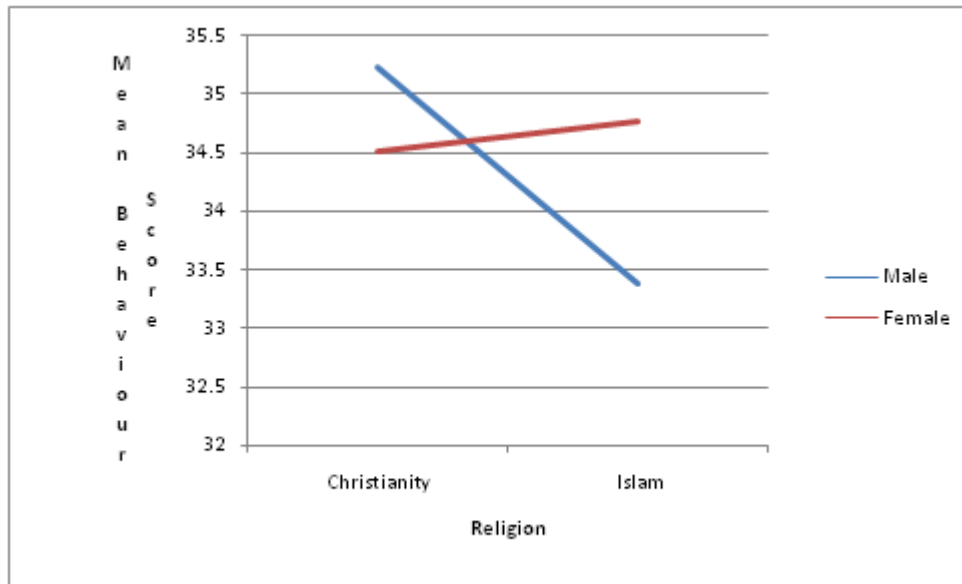


Figure 1: Interaction Effect of Gender and Religion on Mental Health Education Risky Behaviour of Participants

Figure 1: shows that among the Christian participants, males had higher mean mental health education risky behaviour score ($\bar{x} = 35.23$) than the females ($\bar{x} = 34.52$) while the reverse is the case among Muslim where females obtained higher mental health education risky behaviour score ($\bar{x} = 34.77$) than their male counterparts ($\bar{x} = 33.38$). This gives a disordinal interaction.

SUMMARY OF FINDINGS

The findings of the study are summarized as follows:

- Adjusted posttest mental health education risky behaviour mean score of students exposed to treatment and their counterparts in the control group is not significant but students in the treatment group obtained slightly higher mean score than their control group counterparts.
- Effect of religion on posttest mental health education risky behaviours is not significant but female students obtained slightly higher adjusted posttest mean risky behaviour score than their male counterparts.
- The 2-way interaction effects of treatment and religion on students' mental health education risky behaviour is significant. Males had higher mean score among Christians but females obtained higher score than their male counterparts among Muslims.

DISCUSSIONS

Appropriate health information techniques, skills and the use of educational materials and effective teaching methods were used to help in the explanation of risky behaviours during the intervention programme. Still the adjusted posttest mental health education risky behaviours mean score and effect on religion among students exposed to treatment programme and their counterparts in the control group were not significant. Only slight higher mental health education risky behaviour adjusted posttest mean score was observed among students in the treatment group compared with their control group counterparts. But the 2-way interaction effects of treatment and religion on students' mental health education risky behaviour was significant probably because of parents' and religious leaders' efforts to reform the adolescents through different positive activities and teachings in their different capacities. The study is in agreement with Heritage Foundation (2012); Sinha, Cnaan, Gelles (2007) and Fagan (2006) who revealed that religious teens are less likely to take part in risk behaviours like abusing drugs and alcohol, be sexually active, engage in violence, or be delinquent.

However, unhealthy behaviour could be a reflection of poor upbringing by parents and religious leaders because adolescents gain their health practices largely through family and religious influences which may continue for years in life. This submission is in line with the expression by Awoniyi (2003) that "charity begins at home" which is the oldest and most unique human institution and the cradle of discipline. The home should ensure adequate and effective development of adolescents for a better society beside the provision of care, protection and social skills. Healthy behaviour should be developed early in life because it is always difficult to stop once it is formed. Also, the review of Glanz, Rimer, and Lewis (2002), on acceptance of behavioural change as regards Health Belief Model (HBM) explained that individuals will accept to engage or take step about an action only after he/she perceives whether the outcome will be favourable or otherwise. Therefore students' "readiness" to accept and take action towards acceptance of mental health education may be after they have considered that the **cues to action** (activities in the programme) and **self – efficacy** (confidence in their ability to successfully perform the actions) will benefit them which may not be immediate but after sometimes.

CONCLUSIONS

Based on the findings the study is therefore concluded that mental health education is useful and efficient in reducing risky health behaviours among in-school adolescents in the Central Senatorial District of Kogi State Nigeria. Effective mental health education would bring about positive changes in risky behaviour on interpersonal violence, poor eating habit, and anxiety, multiple sex partners and substance use among in-school adolescents in the district. This would help to reduce expenses of medical bills; cost of fighting crimes and inadequate gainful man power in the nation will be reduced. Most especially the rate of anti-social behaviour, ill-health that predispose to unfilled life potentials early demise among school adolescents in the contemporary society will be prevented.

RECOMMENDATIONS

Based on the findings from this study, the following recommendations were made:

- Thorough mental health education activities should be built into general school system for students with approved communication between teachers, school counselors, parents and students will help develop, promote, evaluate and correct behaviours and desirable living against alternative destructive among adolescents.
- Government should include vocational activities in the school curriculum from the grass root to improve positive mental health of students and engage them positively and constructively after school periods and also to provide additional source of self sustenance and contribution to national development as good citizens.
- Curriculum planners should recognize and make health education a core subject like English language and mathematics in the secondary school. This is because the discipline can adequately deal with mental health education.
- Government should enact legislation preventing the advertisement of things that can promote risky behaviours such as handling of weapons at certain age, nude dressing and prostitution that may encourage risky sexual behaviours.
- Parents and religious leaders and elder siblings should learn how to train adolescents in the right ways they should behave in society.
- Religious organizations should design and develop effective and positive mental health programme that can help adolescents rather than the fanatical doctrines.

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