Childhood inter-parental violence exposure and dating violence victimization among 20-24 years old undergraduates in Dar es salaam

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CHILDHOOD INTER-PARENTAL VIOLENCE EXPOSURE AND DATING VIOLENCE VICTIMIZATION AMONG 20-24 YEARS OLD UNDERGRADUATES IN DAR ES SALAAM

By

Elly Nollah Helela

A Dissertation Submitted in (Partial) Fulfillment of the Requirement for the Degree of Master of Science in Clinical Psychology of the Muhimbili University of Health and Allied Sciences

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CERTIFICATION

The undersigned certify that they have read and hereby recommend for acceptance by Muhimbili University of Health and Allied Sciences a dissertation entitled ***''Childhood inter-parental violence exposure and dating violence victimization among 20-24 years old undergraduates in Dar es Salaam''***, in (partial) fulfillment of the requirement for the degree of Master of Science (Clinical Psychology) of Muhimbili University of Health and Allied Sciences.

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Date: _____

DECLARATION AND COPYRIGHT

I**, Elly Nollah Helela**, declare that this **dissertation** is my own original work and that has not been presented and will not be presented to any other university for a similar or any other degree award.

Signature…… **Date** …….

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DEDICATIONS

This work is dedicated to my lovely Mother Asisimwe Kaguo Sanga, thank you so much for your prayers, my family, my wife Sabina George Mkwabi for her contributions, my son Joseph Elly Nollah Helela and my daughter Sally Elly Nollah Helela, for their tolerance of my abscence is appreciated.

ABSTRACT

Introduction: Several studies worldwide show a relationship between witnessing inter-parental violence (IntPV) and childhood abuse exposure and low self-esteem, depression, alcohol abuse, acceptance of non-equitable gender norms and male entitlement as risk factors of dating violence victimization (DVV). There is lack of documented studies on the prevalence and associated risk factors of DVV among undergraduates in Tanzanian universities.

Objective: The aim of this study is to determine the prevalence of DVV and childhood IntPV witnessing during childhood in a University undergraduate populationaged 20-24 years old at MUHAS in Dar-es-Salaam, Tanzania; and determine the associations between DVV and IntPV and other risk factor including alcohol and substance use, depression, self-esteem, accepting non-equitable gender norms and male entitlement.

Study Design: A quantitative cross-sectional analytic study was used to respond to the study objectives.

Methodology: Proportionate random sampling was used to select participants from undergraduate programmesto be representative of the target population, giving each in the population an equal chance to be selected. Structured questionnaires that wereself-administered were used to collect sociodemographic measures, dating violence (DV) occurrence and selected risk factors associated with DV.

Results: Half of the population studied experienced childhood violence, reported by men (54.9%; n=112) than women (33.7%; n=62; p<0.001). About a quarter of men and women be (24.2%; n=94) reported being exposed in childhood to emotional inter-parental violence; with rates in men being 27.5% (n=56) and women 20.7% (n=38; p=0.13). Overall, any form of recent DVV (in past 12 months) was reported by 73.5%, rates in women and men being 76.1% (n=140) and 71.1% (n=145; p=0.30) respectively.

Multivariate analyses using a full effects model showed not knowing the age of a current intimate partner compared to the partner being older than 25 years (OR 0.21; 95% CI 0.08, 0.52; p=0.001) and moderate compared to high self esteem (OR 0.83; 95% CI 0.46, 1.49; p=0.07) were independently associated with DVV reducing this risk by 79% and 17% respectively; this effect being significant for the former and marginally significant for the latter. Furthermore, the absence of any childhood abuse compared to its reporting (OR

0.73; 95% CI 0.38, 0.86; p=0.007) reduced by 27% the likelihood of reporting recent DVV. However, interaction effects of sex were detected and findings of sex desegregated multivariate analysis showed; not knowing the age of a current sexual partner compared to the partner being 25 years or older remained a significant risk factor, reducing the likelihood of reporting DVV by 78% in women (OR 0.22; 95% CI 0.07, 0.75; p=0.02) and 79% (OR 0.11; 95% CI 0.02, 0.75; p=0.02) in men; moderate compared to higher self esteem increased by almost 2.5 times reporting DVV in men (OR 2.43; 95% CI 0.99,5.93 p=0.05) but not women (OR 1.38; CI 0.50, 3.86 p=0.54); and holding moderate versus strong gender inequitable norms amongst men was protective, reducing the risk of reporting DVV by 59% in men but not women. With none of the more distal risk factors assessed having associations with recent DVV in either men or women.

Conclusions and Recommendations: This study found high prevalence of DVV in undergraduate students as well as childhood violence exposures. In examining associations between witnessing inter-parental violence and current DVV exposures outcomes, findings suggest support to the theory of male entitlement in intimate relationship dynamics as a risk factor for DVV in men. Further they suggest increased familiarity and emotional commitment to one's partner may be associated with DVV using the proxy measure of knowledge or not of the age of one's current sexual partner. While no associations were found between witnessing inter-parental violence and DVV, associations between DVV and lower compared to higher levels of self esteem may suggest underlying difficulties with emotional regulation that may be caused by childhood violence exposures. In concluding this study provides preliminary findings which suggest need for better designed studies such as as longitudinal cohort studies, to assess causal relationships between childhood witnessing IntPV and DVV during young adulthood in University undergraduates. Such studies may also better identify protective fators in this population sub-group providing important information to guide interventions in the Tanzanian context.

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LIST OF ABBREVIATIONS

AUDIT	Alcohol Use Disorder Test
CA	Child abuse
CAGE	Cut-down, Annoyed, Guilt, Eye opener
CTS	Conflict Tactic Scale
DV	Dating Violence
DVV	Dating Violence Victimization
EDVV	Emotional dating violence victimization
EPSEM	Equal Probability of Selection Method
GEM	Gender Equitable Men's Scale
ID	Identity
IntPV	Inter-parental Violence
IPV	Intimate Partner Violence
MUHAS	Muhimbili University of Health and Allied Sciences
PHQ-9	Patient Health Questionnaire
PDVV	Physical dating violence victimization
RA	Research Assistant
SDVV	Sexual dating violence victimization
SPSS	Statistical Package for the Social Sciences
SSA	Sub-Saharan Africa
TDHS-2015	Tanzania Demographic Health Survey-2015
WHO	World Health Organization

OPERATIONAL DEFINITIONS OF TERMS

Intimate Partner Violence: Intimate partner violence (IPV) refers to behaviour within intimate relationships that cause physical, sexual, or psychological harms, including acts of physical aggression, sexual coercion, psychological abuse and controlling behaviours to physical, sexual, or psychological harm by a current or former intimate partner or spouse, and can occur among heterosexual and same-sex couples alike (Undie et al., 2012). The World Health Organization (World Health Organization, 2002) defines IPV as physical, sexual, and emotional or psychological violence by a current or former intimate partner or spouse.

Inter-Parental Violence: Inter-parental Violence (IntPV) describes physical, sexual, or psychological harm by a current or former spouse who are also parents, and can occur among heterosexual and same-sex couples alike (Undie et al., 2012).

Forms of violence: *Physical Violence:* Physical violence is the intentional use of physical force with the potential for causing death, disability, injury or harm. It includes, but is not limited to, scratching, pushing, shoving, and throwing, grabbing, chocking, burning, biting, use of a weapon, restraint, size or strength against another person.

Sexual Violence: Sexual violence is any sexual act or attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic a **person's** sexuality, using coercion, threats of harm or physical force, by any person regardless of relationship to the victim, in any setting, including but not limited to home and work. Sexual violence is divided into three categories; a) Use of physical force to compel a person to engage in a sexual act against his or her will, whether or not the act is complete

b) An attempted or completed sex act involving a person who is unable to understand the nature or condition of the act, to decline participation, or to communicate unwillingness to engage in the sexual act (e.g., because of illness, disability, young age or the influence of alcohol or other drugs, or due to intimidation or pressure). c) Abusive sexual contact: Seeking sex using threat of violence including the use of words, gestures, or weapons to communicate the intent to cause death, disability, injury, or physical harm (Khaemba, 2014).

Emotional/Psychological Violence: Psychological or emotional abuse is injury caused by acts, threats of acts, or coercive tactics that may include acts like denial of basic needs like money, food and shelter, shaming, threats made using the children and other threats or acts that act as emotional and psychological stressors (Khaemba, 2014).

Dating violence (DV): For this study, this is operationally defined as the use or threat of physical force or restraint carried out with the intent of causing pain or injury to a non-spousal partner with whom one has a dating relationship, the definition including both sexual, and emotional/psychological forms of violence, since these forms of violence often precede or occur in concert with physical violence (Shorey, Cornelius, & Bell, 2008).

DV Victimization: Is an act whereby a person suffers from direct or threatened physical, emotional, or financial harm as a result of an act by someone else in an intimate relationship before marriage.

Child maltreatment: All forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in

the context of a relationship of responsibility, trust or power (Butchary, Putney, Furniss, and Kahane, 2006). For the purpose of this study, child abuse a subcomponent of child maltreatment, is more narrowly defined as all forms of physical and/or emotional ill-treatment, and sexual abuse.

Non-equitable gender norms: These are attitudes that are linked to early socialization that promote certain gender roles as norms. These norms include support for inequitable gender norms and gender roles, example support for men to maintain control over the behavior of their female's partners.

Keywords: dating violence, inter-parental violence, intimate partner violence, victimization

1.0: INTRODUCTION AND LITERATURE REVIEW

1.1 Introduction

Dating violence is defined as controlling, abusive, and aggressive behaviour in a romantic relationship prior to marriage and includes verbal, emotional, physical, or sexual abuse or a combination of these forms of violence (Bonomi et al., 2013; Houston, 2012; Oshr et al., 2015). Dating violence is hence a component or dimension of intimate partner violence (IPV), that can also include acts of physical aggression, sexual coercion, psychological abuse and over controlling behaviour (Oshri et al., 2015; Stappenbeck & Fromme, 2010; Umana et al.,2014; Whiteside et al., 2013). Operational definitions of the forms of IPV have been used in standardized measures such as the Conflicts Tactics Scale (M.A. Straus, Hamby, Boney-McCoy, & Sugarman, 1996) which is the most widely used with components of this scale adapted for use in many national demographic surveys.

Previous studies have found a high rate of dating violence among college students with 9% - 87% of students experiencing some form of psychological, physical or sexual abuse in their current or previous relationships (Umana et al., 2014; Shorey et al., 2012; Holt & Espelage, 2005; Shorey et al., 2012; Harned, 2001; Foshee, 1996; Makepeace, 1981). The effects of dating violence in college students are serious and may be long lasting. Studies investigating effects of dating violence victimization show a number of negative physical and mental health outcomes such as drug and alcohol use, unhealthy weight concerns, high risk sexual behaviours, and perceived lower quality of life, and even suicide (Reed et al., 2010). The high prevalence of dating violence and its association with negative physical and mental health outcomes warrants better understanding of factors associated with the phenomenon in contexts where large numbers of young adults reside and little information exists such as in most low-income countries in sub-Saharan Africa.

The conceptual framework used in this study viewed IntPV and CA exposure as distal risk factors for DVV and alcohol use, depression, low self-esteem, accepting non-equitable gender norms – IntPV and male entitlement as more proximal risk factors.

Witnessing interparental violence and other childhood adversities such as child abuse exposures have been associated with DVV in some Western studies sampling university/college students (Foshee et al, 2013; Spitzer, 2000; Exner-Cortens et al., 2012) and in a Nigerian study (Umana et al., 2014). Reported outcomes of witnessing interparental violence as well as exposures to other childhood adversities include higher depressive symptomatology, and use of alcohol and other drugs of abuse (Kaukinen, 2014; Paat et al., 2016; Foshee et al, 2013; Spitzer, 2000; Exner-Cortens et al., 2012). Studies suggest the disinhibition caused by substances and alcohol may results in diminished ability to avoid violence (Umana et al., 2014; Kaukinen, 2014) and partner neglect (Umana et al., 2014), both of which may facilitate tensions within intimate relationships that may result in violent responses. Use of alcohol and other substances of abuse may also deter victimsof dating violence from resisting unwanted physical or sexual advances or prevent then from being able to interpret warning cues of potential violence and hence increase the likelihood of DVV (Umana et al., 2014; Kaukinen, 2014).

Repeatedly Witnesssing IntPV and CA exposure in childhood impact on the developing child, interfering with development of impulse control (cognitive construct) that may affect the children's experience, expression and control of emotion. In a sense observing hostility between their caregivers is a dysregulating experience that may lead to heightened emotional reactivity in children.

In addition, early trauma affects the neurological development of young children, who may not be able to develop the neuronal structures necessary to process information, regulate emotions, and categorize experiences. This can lead to poor impulse control, aggression, difficulty in interpersonal relationships, and poor academic performance because of their inability to concentrate. In later development, such children may develop self-harming and substance abuse disorders in an effort to regulate their emotional arousal, owing to their difficulty in self-soothing and affect regulation. Van der Kolk suggested that multiple exposures to childhood traumas, including "abandonment, betrayal, physical or sexual assaults, or witnessing domestic violence" (Van der Kolk., 2005) can have negative sequelae that continue to reverberate throughout childhood, adolescence, and adulthood.

Trauma theory holds that repeated exposure to affectively arousing events affects the neurological development of young children, who may not be able to develop the neuronal structures necessary to process information, regulate emotions, and categorize experiences. Sexual abuse significantly and positively, is related to compromized impulse control, as emotional abuse is linked to impulsivity and problems with behaving in accordance with desired goals especially when the parents are the abusers, the impulsivity results into and is directly linked with sexual violence, alcohol abuse, and verbal abuse in adulthood causing DVV (Oshri et al., 2015).

Effects on childrens ability to process information (cognitions) generates emotional responses, and some authors note responses mediated through appraisal of threat, often accompanied with fear, and appraisal of blame which may illicit shame, both of which have been associated with future adjustment problems (Oshri et al., 2015; Paat et al., 2016). Adjustment problems have been reported to manifest differentially by gender, with girls more likely to exhibit internalizing behaviors presenting with features of emotional distress and boys exhibiting more externalizing behaviours such as non-prosocial behaviors, e.g. use of alcohol and other substances of abuse and relational difficulties. These differences has been explained by Helgeson's (1994) theory of gender roles which emphasizes experiential differences in the socialization of boys and girls (Oshri et al., 2015; Muñoz-Rivas et al., 2007).

The intergeneration transmission theory (IGT) of violence has been much used in studies collecting data to explain witnessing interparental violence in the family of origin as the etiology of intimate partner violence in adulthood. The concept, IGT of violence (Kalmuss, D. 1984), gained theoretical basis from Bandura's (1971, 1973) early studies examining aggression used by children that shed light on violence as a socially learned behavior. Because the family is a main socializing institution and the main source of childhood learning, aggression modeled between parents provides scripts for violent behaviors and also may teach the appropriateness and consequences of such behavior in an intimate relationship to children through direct and indirect reinforcement of rewards and punishments. In the African context, this theory has some resonance with regards to IPV as there is some qualitative evidence of cultural acceptability of male dominance in

intimate relationships that may generate social acceptability of male-to-female violence and this may moderate the associationswith DVV among women, while retaliatory female-to-male would moderate associations with DVV among men, when cultural norms justify violence as acceptable methods to resolve conflict. When combined with low self-esteeem in particularly women not assertiveness in intimate relationship, reduces negotiating skills and power and this may contribute to their higher risk of DVV (Umana et al., 2014; Kaura & Lohman, 2007). Within young adulthood there may be opportunities to intervene before such patterns of violent relationships in later adulthood become fixed (Sutton, 2012).

2.0 PROBLEM STATEMENT AND JUSTIFICATION

2.1 Problem statement

Dating violence is among major problems affecting young persons worldwide in intimate relationships with an alarming prevalence in several university settings including in Asia and the Middle East, Europe, Latin America, Australia and New Zealand and North America. Rates of forms of dating violence was as high as 87% for psychological/emotional violence, 7.9%-50% for physical violence and 6.6% -20% for sexual violence as noted in a recent review of literature (Shorey et al., 2012; Douglas, Straus, 2006;Holt & Espelage, 2005; Lehrer , Lehrer & Zhao, 2009;Harned, 2001; Umana et al., 2014). Despite these high prevalences for dating violence, in the Tanzanian context, there is no information on the magnitude of dating violence among university students.

The distal risk factorsof DV that have been most studied, are witnessing IntPV in the family of origin during childhood and experiences of childhood abuse. The need to intervene is informed by observations that young adults who have witnessed IntPV during childhood are also likely to experience symptoms of depression; and to use drugs and alcohol (Foshee et al, 2013; Spitzer, 2000; Exner-Cortens et al., 2012).In many universities, DV exposure also poses a threat to the emotional/psychological, sexual and physical health of the individual. Physical and sexual abuse exposure during childhood also affects children's quality of life, diminishing productivity and eroding self esteem and worth, all of which impact negatively on optimal adulthood (Undie et al., 2012). As IntPV exposure has been established as a risk factors for DV in both adolescents and adults elsewhere (Bonomi et al., 2013), it would be important to establish whether this association is also present in a Tanzanian university student sample. As IntPV is an important high level risk factor that increases exposed individual's vulnerability to future DVV, as well as other poor mental health outcomes; understanding the strength of this association in the Tanzanian context would be important for DVV prevention interventions.

This study will provide initial evidence on the prevalence of and risk factors for DVV in university students with IntPV exposure as a risk factor of interest.

2.2 Justification for the study

There is lack of information on the association between DV and exposure to IntPV in Tanzania. There is a need to study this association as IntPV is a distal or higher-level risk factor that may be cost-effectively intervened through, for example parenting programmes with couples in antenatal settings aimed at future violence prevention in young adulthood. This study hypothesizes that exposure to IntPV in childhood increases the risk for victimization in intimate relationships in young adulthood. The purpose of this study therefore is to explore whether witnessing inter-parental violence in childhood is associated with dating violence victimization among undergraduate male and female university students in Dar es Salaam.

3.0 RESEARCH QUESTIONS

a) Are IntPV and CA exposure associated with DVVamong 20-24 years undergraduates in Dar es Salaam?
b) Is depression, low self-esteem, substance abuse and positive non-equitable gender norms, associated factors for DVV in 20-24 years undergraduates in Dar es Salaam?

In university students;

i. Is childhood witnessing of IntPV and CA exposure associated with DVV?
ii. Is depression, low self-esteem, drug/alcohol use and endorsement of non-equitable gender norms, associated with DVV?

4.0 RESEARCH OBJECTIVES

4.1 Broad Objective

The aim of the study is to determine the prevalence of DVV and IntPV exposure during childhood in a university undergraduate population aged 20-24 years old at MUHAS in Dar-es-Salaam, Tanzania; and to determine associations between the two and other adjusting for other known risk factors.

4.2 Specific Objectives

a. To determine the prevalence of DVVand associated factors (past 12 months) victimization in undergraduates aged 20-24 years at MUHAS.
b. Determine prevalence of IntPV witnessing and CA exposure in undergraduates aged 20-24 years at MUHAS.
c. To determine association between DVV and psychological status (depression, self-esteem and alcohol use).
d. To determine the association between witnessing IntPV during childhood and DVV (past 12 months) in undergraduates aged 20-24years at MUHAS.

5.0: LITERATURE REVIEW

5.1 Magnitude of dating violence in college students

Several studies show partner violence is a prevalent problem among dating couples worldwide in high middle and low income countries (Murray A. Straus, 2008). As most studies on IPV in Tanzania, have focused on marital violence, it is important to get information of the situation of dating violence. University students provide an excellent population to study this phenomenon.

Most studies of the magnitude of DVV in university studies have been conducted outside the Sub-Saharan African (SSA) context. Studies amongst university students in the United States of mean age 19.2 years, show physical DVV rates range from 20% to 30%, while sexual DVV ranges from 9% to 20% and that of psychological DVV occurs most commonly, reported and is approximately 80% of dating relationships (Shorey et al., 2012). Similar high rates of psychological DV exposure were reported in a study amongst 484 women and 466 menattending a Chilean university, ranging in age from 17 to 30 years (median age of 20 years), showing 67.3% of females and 79.9% of males who had been on a date or in a romantic relationship in the past 12 months reported at least one incident of psychological victimization in this period (Lehrer et al., 2009). A large multisite study conducted in 36 universities in 19 countries (N = 9,549), showed 15% – 47% reported assaulting a dating partners, and a median of 7% causing physical injury as a consequence of such assault (Douglas, Straus, 2006).

Few studies have explored the prevalence of dating violence in university students in the African continent; they however suggest rates of DVV may be significant. Only one could be retrieved that was an analytic cross-sectional study conducted amongst female students of age above 20 years, 74.5% of whom were 20-25 years at Ibadan University, which showed a life-time prevalence of any IPV victimization of 42.3%; with a higher prevalence in undergraduates (44.1%) compared to postgraduate (34.5%, $p<0.05$) students. The rates of violence experiences reported were higher for psychological, than physical and sexual forms of IPV victimization with rates of 41.8%, 7.9% and 6.6% respectively. However, in this study 7.9% of the students were reported to be married and a distinction was not made between students that were married versus those who were not in terms of their IPV

exposures (Umana et al., 2014). These observations make it important to explore victimization from DV for both male and female single students in the Tanzanian context.

5.2 Effects of Dating Violence in College Students

Dating violence is important to study because of the many health problems with which it has been associated. Depressive symptoms in particular have been associated with DV victimization and are reported to be the most common mental health complications of DVexposure (Harned, 2001; Kaura & Lohman, 2007). Depression has been reported following both minor and more severe forms of such victimization (Harned, 2001). Other psychological effects of DVVreported in a review by Kaura & Lohman, (2007) included somatic complaints, anxiety symptoms and decline in relationship satisfaction. From a cognitions point of view, individuals with a history of**exposure to** violence often show decreased abilities to effectively solve problems and display inferior communication skills than individuals not exposed to such violence including less facilitative communication (Robertson & Murachver, 2007) and may develop the belief that violence is a successful and normal way to influence ones partner and gain control in the relationship context (Cornelius & Resseguie, 2007; Muñoz-Rivas et al., 2007). Physical injuries are not uncommon following DVV and notes that female victims are more likely than male victims to sustain physical injuries as a result of such abuse (Muñoz-Rivas et al., 2007; Fossos et al.,2007; (Amar & Gennaro, 2005). Young adults who are victims of DVV are also more likely to experience symptoms of depression and anxiety, engage in unhealthy behaviors, like using tobacco, drugs, and alcohol, or exhibit antisocial behaviors and think about suicide (Foshee et al, 2013; Spitzer, 2000; Exner-Cortenset al., 2012; Vagi et al., 2013). Only one study in a SSA population reported adverse effects of IPV in university students including inability to concentrate and poor academic performance reported by 10.3% of victims in a study of students at Ibadan University (Lehrer, Lehrer, & Zhao, 2010). Given these adverse effects, better understanding of intervenable risk factors is imperative for interventions aimed at minimizing the harm associated with DVV.

5.3 Risk factors associated with DV

A number of risk factors of DV have been observed in cross sectional studies of university students including alcohol abuse, which diminishes abilities to avoid violence, and also increases the risk of multiple partners (Umana et al., 2014), nicotine smoking status has also been associated DV (Bonomi et al., 2013; Stappenbeck & Fromme, 2010). Amongst university students, Nabors, (2010) did not find any association between use of drugs other than alcohol and physical DVV in men, though Durand et al., 2007 noted an increased risk of physical DVV with use of marijuana in women. It should be noted that most of these studies are cross-sectional, making causal inferences difficult; and few longitudinal studies to determine causal associations between substance use and DVV have been conducted.

Other more distal factors associated with DV exposures include, ethnicity, religion, childhood abuse and childhood witnessing of IntPV. Effects of ethnicity and religion on DV may be linked to a broader range of societal factors such as supporting attitudes of male dominance over women, and cultural norms that justify relationship violence as an acceptable method to resolve conflicts both in social and cultural processes as reported from Nigeria (Umana et al., 2014; Paat y, & Markham C, 2016, Nabors, 2010). Witnessing interparental violence (IntPV) in the home during childhood and experiences of childhood abuse have been more extensively studied as risk factors of DV (Shorey et al.,2013; Kaukinen, 2014; Paat et al., 2016). In a sample of boys and girls aged 14-19 years, who reported high levels of witnessing inter-parental violence 49% reported they had inflicted violence at least once towards a dating partner and 55% had experienced at least one incident of DVV; similar rates for teenagers who had not witnessed inter-parental violence were however not available. However, other studies show that witnessing family of origin IPV is associated with increased risk of violence victimization in one's future family (Lehrer et al., 2009. Lehrer et al., 2010), and is the argued facilitating link between parental behaviors in one's family of origin and young adults violent behaviors in dating relationships (Makepeace, 1981).

O'Keefe (1998) explored factors that mediate the relationship between high levels of witnessing IntPV and exposure or not to dating violence in adolescence. Findings showed differences in the effect of mediator by sex; for example, low socioeconomic status,

exposure to community and school violence, acceptance of violence in dating relationships, and low self-esteem differentially mediated this relationship in adolescent boys and girls; low socioeconomic status and acceptance of violence in dating relationshipsdifferentiated males who experienced dating violence and those who had not. For females, exposure to community and school violence, poor school performance, and experiencing child abuse differentiated those who inflicted dating violence from those who had not, while poor school performance and experiencing childhood abuse differentiated females who experienced dating violence and those who had not; these observations further supporting a probable social learning process.

6.0 THEORETICAL FRAMEWORK FOR CAUSALITY OF DATING VIOLENCE

Theories to explain being a victim of dating violence are mainly based on social learning theory. The premise of social learning theory is that all behavior is learnt through social interactions. Until recently the most common view, popularized by various personality doctrines, depicted behavior as driven by inner forces in the form of needs, drives, and impulses, often operating below the level of consciousness. Since the principal causes of behavior reside in forces within the individual that is where one looks for explanations of man's actions (Bandura, 1971). In this study, the conceptual framework looks into three main groups of factors driving behavior these being; two distal and four proximal factors related to the outcome (DVV).

In order to predict DVV, low self-esteem, depression, alcohol abuse, and acceptability of inequality are risk factors reported to be present in victims, perpetrators or in both victims and perpetrators. Witnessing of interparental violence and experiences with childhood adversities such as physical abuse/maltreatment is reported to result in low self-concept in adulthood, of which self-esteem is a key concept.

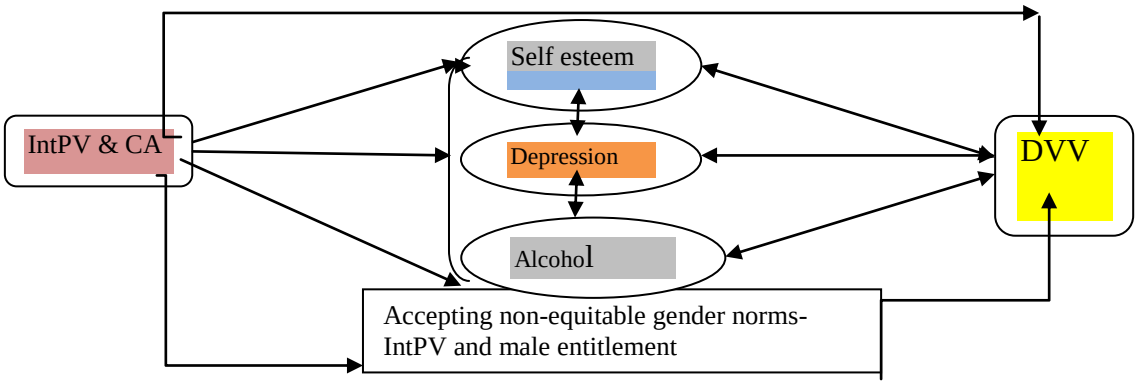


Figure 1: Conceptual framework for DVV

The cognitions of such adversity exposed children, through mechanisms of altered appraisal of threats (fear), and appraisal of blame, affect emotional adjustment resulting in behavioral problems exhibiting either as internalizing or externalizing behaviors, which are more prominent if both stressors of witnessing parental violence and childhood abuse have

occurred (Carlson, 1991; Grych, Jouriles, Swank, McDonald, & Norwood, 2000). Depression in young adulthood and misuse of alcohol and other substances of abuse are likely consequences of poor psychological adjustment in childhood as had been reported in the literature. Altered appraisal of threats generating fear, impaired decision-making abilities and decrease the strength of motives for emotional control that the presence of low self-esteem creates a fertile ground for poor psychological adjustment, evidenced as externalizing or internalizing behaviors in childhood; and risk for developing depression in adulthood. Associations have also been shown in young adulthood between childhood adversity and increased risk of misuse of alcohol and other substances of abuse. The disinhibition associated with using alcohol and other substances of abuse may result in a victim's diminished ability to avoid violence, make victim's unable to resist unwanted physical or sexual advances and or prevent victims from being able to interpret warning cues of a potential assault hence increasing likelihood of DVV. In the African context, socially learned acceptability of cultural norms of male's dominance over women in intimate relationships may increase, particularly women's risks as victims of DVV.

7.0 RESEARCH METHODOLOGY

7.1 Study Area

The study was conducted in the Dar es Salaam region, and self-report interviews were administered at Muhimbili. Muhimbili University of Health and Allied Sciences (MUHAS) is a public University, offering a variety of undergraduate programmes including medicine, dentistry, pharmacy, nursing, environmental health sciences, medical laboratory sciences (6 programmes) & radiotherapy technology. Students from all undergraduate were included in this study who in total are 1,950, among them 1097 are eligible for investigation by age (20-24 years), of whom 708 (64.5%) are males and 389 (35.5%) females. Age 16-24 years old experience the highest rate of Intimate Partner Violence. And 70% of those aged 20-24 years are victimized by a current or former boyfriend or girlfriend. MUHAS was selected because was easier to reach for investigators (principal investigator and researcher assistants) and the supervisors to save time and travelling expenses, also considerstion of the availability of selected study population (undergraduates).

7.2 Study design

A descriptive cross-sectional survey using quantitative data collection methods was used to respond to the objectives and research questions.

7.3 Study population

Male and female university-based undergraduate students aged 20-24 years registered for undergraduate programs at MUHAS in Dar es Salaam, Tanzania. Age 20-24 years have the highest rate of intimate partner violence and 70% of those aged 20-24 years are victimized by a current or former boyfriend or girlfriend. Also severity of intimate partner violence is often greater in cases where the pattern of abuse is established in young adult.

7.4 Study duration

The study was conducted over an eleven-month’s period from June 2015 – April 2016.

7.5 Inclusion criteria

- Aged 20-24 years old
- Had an intimate relationship with the opposite sex in the past 12 months.
- Single marital status.
- Registered to attend an undergraduate program at MUHAS.
- And agreed to undergo an informed consent process and signs consent to participate

7.6 Sample Size Estimation

Sample size was estimated based on the following formula.

$$n = \frac{z^2 p (100-p)}{\varepsilon^2}$$

Whereby:

n=Estimated minimum sample size required

z = level of confidence (1.96 for 95% confidence level)

p = expected proportion of any form of intimate partner violence in the population; this is estimated at 40% from the prevalence estimates of attitudes and experiences among women and men of IPV investigated among 2,006 participants aged 15-49 years for women and 15-54 years for men in Uganda as an estimate closest to Tanzania (Speizer, 2011).

ε = margin of error will be $\mathbf{5^2}$

$$n = \frac{1.96 \times 1.96 \times 40 (100-40)}{25} = 368$$

Adjusted for non-response by adding 10% to the estimated sample size (n= 36); therefore, the minimum estimated sample size was 404.

Other assumptions

- 80% were assumed to have had a relationship in the past 12 months
- 5% were assumed to be in a marital relationship

Hence 557 students were screened to recruit the required sample of 404.

Proportionate stratified random sampling was used to select participants from program of various strata that were proportional to the representation of the strata in the target population. As such, it was a self-weighting and equal probability of selection (EPSEM) sampling procedure. The proportionate sampling fraction was applied to each stratum, giving every participant in the population an equal chance to be selected. The resulting sample was hence a self-weighted sample. Undergraduate nominal rolls for each program were used as a sampling frame to randomly select the required number of students from each stratum using computer generated random numbers. Each student from the randomly selected student's list was invited to participate in the study, consented and once consented screened for inclusion criteria and a unique ID assigned for eligible participants. Student's phone contacts were collected by research assistants and the students were reminded about filled form pick up a day or two before the agreed date.

7.6.1 Sampling procedures and data collection

Five hundred and fifty seen undergraduate students were selected using a proportionate stratified random selection process from a sampling frame derived from all undergraduate programs and listed in a recruitment master register. Figure 2 summarizes the recruitment procedure

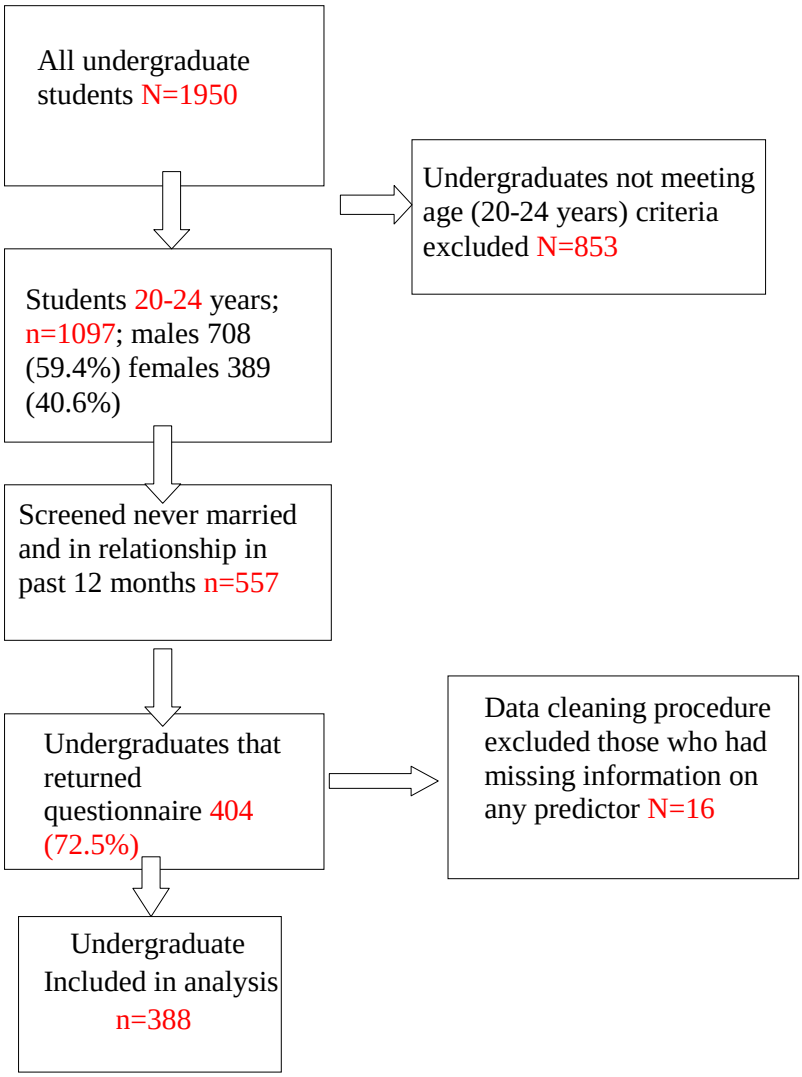


Figure 2: Study participants' recruitment flow chart

7.7 Data Collection Tools

7.7.1 Structured questionnaires (Appendix 3)

These were self-administered and adopted from a study done amongst students at Ibadan University (Umana et al., 2014) were used to collect information socio-demographic data, current dating violence, family of original violence (witnessing interparental violence and exposure to violence before the age of 15 years), details of the measures are provided below.

Socio-demographic measures:

Socio-demographic variables were included to assess associations between them and DV. They include the following items, age, gender, ethnicity, year of study, registered programme, use of alcohol and substances by sex and age of current partner, and source of tuition and living costs fees.

Psychological status and gender norms measures:

Patient Health Questionnaire (PHQ-9) this was a measure of student's current level of depressive symptoms. Depressive symptoms over the last two weeks were assessed using the nine- items of Patient Health Questionnaire, with an additional item for functional impairment (Bonomi et al., 2013; Spitzer, 2000). PHQ- 9 appears to be a valid and reliable for assessing DSM-1V depressive disorder and depression severity.The tool has been cross-culturally used and validated in Kenya (Monahan et al., 2008), and has been validated in general primary care outpatients in urban Tanzania with evidence of a score of 9 as an appropriate cut-off for probable depression (Kaaya et al personal communication). Response items on the 4-point Likert Scale for each symptom included 0= Not at all; 1 = several days; 2 = More than half the days, 3 = nearly every day, a higher score indicated more depressive symptomatology and a score of 9 a higher, symptoms equivalent to DSM IV major depressive disorder.

Rosenberg Self-Esteem Scale: The Rosenberg Self-Esteem Scale (Rosenberg, 1965) was an attempt to achieve a unidimensional measure of global self-esteem. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) with 10 items, has four response choices, ranging from 1 (strongly disagree) to 4 (strongly agree).

The negatively worded five items were reverse scored to generate a scale where higher scores would indicate higher self-esteem. The scale generally has high reliability: test-retest correlations are typically in the range of 0.82 to 0.88, and Cronbach's alpha for various samples are in the range of 0.77 to 0.88. (Blascovich and Tomaka, 1993) as cited by Vial et al., (2005); showed good reliability in the adolescents and young women in the Tanzanian context (Baumgartner et al., 2015).

Gender Equitable Men Scale (GEMS): The twenty-four-item Ethiopian adaptation of this scale comprises two subscales that measured support for inequitable gender norms (16 items) and equitable gender norms (8 items); (Middlestadt et al., 22007). It focuses on key

issues within sexual and intimate relationships, including sexual and reproductive health behaviors, disease prevention, and violence (Pulerwitz & Barker, 2007). Each of the items was scored on a 3-point scale, where 1 = agree, 2 = partially agree, and 3 = do not agree. High scores represent high support for gender inequitable norms. The scale has been used in both men and women and showed good internal consistency of 0.88 when used in Ethiopia. In these analyses, the scale showed adequate psychometric properties for both the inequitable and equitable norms items. As internal consistency was higher for the former this subscale was used in the analyses.

Family of origin violence questionnaire: A family of origin violence questionnaire was used to explore abuse during childhood. Four questions used by Umana et al., (2014), were adopted - to assess childhood abuse experiences occurring before the age of 15 years, including 1) were you ever severely beaten by your parents or guardian? 2) Did any man/woman made naked or masturbate before you? 3) Did anyone fondle you or have sexual penetration with you? 4) And did anyone force you to have sex or to perform a sexual act when you did not want to? Response options were yes or no, the Yes response been coded as 1 = once or twice, 2 = a few (3-5) times, many (more than 5) times

Childhood IntPVexposure: Witnessing was assessed using four questions adapted after piloting questions used in the Umana et al., (2014), study. They included whether, when participants were children younger than 18 years old they had ever seen or heardtheir mother/female guardian being 1) threatened with violence or destruction of her property or harm to her children 2) being pushed, strangled or beaten by their father; her husband or boyfriend; Furthermore, they were also asked if when children and aged younger than 18 years old, they had ever seen or heard their father/male guardian being 3) threatened with violence, destruction of her property or harm to his children 4) being pushed, strangled or beaten by their mother (or his wife or girlfriend). Response options to each of the four questionswas yes or no, the Yes response been coded as 1= Never, 2= rarely (once or twice), 3 = Few to many (3 or more) times.

<u>Current DV assessment:</u>

Items from Revised Conflict Tactic Scale (CTS2), (Straus et al., 1996; Straus, 2008), were used to measure both the extent to which partners in dating, relationship engage in psychological and physical attacks on each other, and also their use of reasoning or

negotiation, to deal with conflicts. It is a standardized tool that has been used successfully cross-culturally (2002) and piloted and used in a number of research projects in Tanzania (García-moreno, 2005; Maman et al., 2002) with good internal consistency and reliability coefficients for the scales at 0.9 and 0.8 respectively. CTS2 response items on victimization for physical [10 items], sexual [6 items] and psychological [11items] forms of violence and response options coded 0= never, and 1= once or more**.**

The RAPS4 is a 4-item version of the RAPS

A positive response on both of these items increases sensitivity of the RAPS4 for identifying those currently meeting diagnostic criteria for alcohol abuse (DSM-IV) and harmful drinking (ICD-10). Have the following items; during the last year have you had a feeling of guilt or remorse after drinking? (Remorse); during the last year has a friend or a family member ever told you about things you said or did while you were drinking that you could not remember? (Amnesia); during the last year have you failed to do what was normally expected from you because of drinking? (Perform) and do you sometime take a drink when you first get up in the morning? (Starter)

7.7.2 Psychometric properties of scale measures.

To explore internal reliability in this study's context of scales used to assess complex constructs, internal consistency of the scales was explored and, Cronbach's alpha estimates were computed. Kline (1999) as cited by (Ridings & Lutz-Zois, 2014) argues that alpha values of 0.8 and above are proper for cognitive tests and those below 0.7 can be accepted for psychological measures. The gender inequitable norms scale (GIN Scale), Conflict Tactics Scale version 2, and Depression Scale (PHQ-9) had high reliability, with Cronbach's alpha estimates of 0.98, 0.97, and 0.97 respectively. A modest alpha estimate of 0.76 was derived for the Rosenberg Self-Esteem Scale. Table 1 summarizes some scale properties from the sample in these analyses.

Table 1: Summarized selected psychometric properties of psychological status and gender norms measures in 388 single undergraduate students in Dar es Salaam

Name of scale (Sum measure range)	No of items	Response options*	Cronbach's alpha	Mean score (N=388)	SD	KMO parameter (p-value)
Rosenberg Self-esteem Scale (range 0-30)	10	0-3	0.76	2.28	4.48	0.96 (<0.01)
Patient Health Questionnaire (PHQ-9) (range 0-30)	9	0-3	0.97	1.15	18.44	0.97 (<0.01)
Gender Inequitable Men Norms (GIN) (range 17-51)	16	1-3	0.98	2.11	0.80	0.90 (<0.01)
Conflict Tactics Scale version 2 (range 0-27)	27	0-4	0.97	--	0.38	0.96 (<0.01)

Key: *Higher scores indicate less self-esteem & depressive symptoms; GIN higher scores less inequitable norms

7.8 Data management and analysis plan

Data management

Data obtained was stored in a secure environment with limited access to unauthorized persons. Data arrangement per program was designed, and data entry was done using SPSS version 20. Data was careful entered and quality control ensured whereby crosschecking used double entry and review after every 100 form entries.

Data analysis

Outcome measure: The outcome measure was DVV. Scores were summed for each form of DVV and dichotomized as 0 = not affirmative for any; and 1 = affirmative for any item. Simple prevalence rates were estimated for current (1-year point prevalence rates) sexual, physical, psychological and any DVV.

Background sociodemographic and schooling independent variables: included age, year of study, degree programme, age of current sexual partner. Psychological status covariates with potential to confound associations with risk factors of interest: included depression, self-esteem, alcohol and other drug use in participant and their intimate sexual partner, gender norms (inequitable or not)

Risk factors of interest: IntPV was summarized by summing the times participant witnessing in childhood (<15 years) sex or emotion or physical violence by mother to partner or by father to partner within at least one violence coded as 1 and < than one as 2 and one rated as 0.

Null hypothesis: Students exposed to witnessing inter-parental violence during childhood have similar rates of DV victimization as students without this exposure.

Frequencies are used to describe the socio-demographic, psychosocial status, basic recent partner characteristics (age and use of alcohol and substances) and family of origin abuse/violence (child abuse and frequency of witnessing during childhood IntPV) of the study population. Given the gendered nature of the outcome of interest, recent DVV, the risk factors are also reported in bivariate analyses by sex where chi-square estimates and p-values are summarized.

Cross tabulations explored bivariate associations between socio-demographic and life style variables, as well as childhood IntPV witnessing, child abuse, depression, low self-esteem, and inequitable gender norms, and DVV as an outcome measure. Logistic regression was the multivariate analyses approach used, for the dichotomous outcome variable, to examine the independent associations between identified risk factors and any recent DVV exposure variable adjusted for, in a full effects model included socio-demographic and schooling variables, psychological status, and experiences of childhood abuse. Bivariate associations where p-values 0.78 (0.38-1.60) were 0.2 or less were included in the logistic regression models. Unadjusted and adjusted odds ratios are reported and determination of potential confounding by gender explored using sex disaggregated multivariate results.

7.9 Recruiting and Training of Research Assistants

Two research assistants were recruited for collection of data. Research Assistants were given the priority to work with the study population. Training for data collection was done at least a week prior the initiation of the study, they were trained on the adaptation of the questionnaires and data collection procedures. Research assistants must have a basic knowledge of the tools and the ability to review questionnaires for completion during collection from participants. Training for research assistant was divided in three different

occasions two days' orientation prior to Pre-testing of the study instrument, practical training data collection processes during pre-testing of the study instrument, and re-orientation two days prior the beginning of data collection.

7.10 Pre-testing of the study Instruments

Pre-testing helped to check if the questionnaire was understood (face validity) and to determine logistical issues such as the time frame for the interviews; findings were used to make proper refinements of the tool and procedures for administration. Pre-testing occurred amongst 10 students aged 20-24 years not randomized to form the study sample, for the questionnaires. During pre-testing was also an opportunity for practical training for the research assistants.

7.11 Ethical Issues and Considerations

Informed consent was obtained from the study participants prior to data collection; they were assured of confidentiality and informed of the right to withdraw at any point during the research. In order to assure anonymity and confidentiality, all participants enrolled in this study had a unique identification number that was unlinked to participant identifiers. The questionnaires were filled out in private and kept safely with the research assistants once returned. The research assistants were trained on the importance of strict confidentiality of all responses given, and on referral of students who needed care to a named person in the student counselor's office. There were no risks anticipated from students filling questionnaires, although some emotions might be aroused when responding questions involving violence and threat and may reactivate prior trauma. Participants were directed to see the student's counselor in the event such emotional arousal feelings aroused by the questionnaire interfered with their relationships or their ability to concentrate. Participants were informed that there were no immediate benefits from their participation, however the information they provided would help guide violence prevention initiatives amongst students in the future. Ethical clearance for conducting the study was obtained from MUHAS Senate Research and Publication Committee.

8.0 RESULTS

8.1 Description of the study population

A total number of 1,097 undergraduates were legible by age (20-24 years old) to participate in the study, among whom 64.5% (n=708) were men and 35.5% (n=389) women. Five hundred and fifty-seven randomly selected students were screened to get the required sample size of 404 undergraduates that met inclusion of having single and in an intimate relationship in the past 12 months. Data cleaning procedures excluded 4% (n=16) of those with missing information on determinant variables like age, sex, and study level, hence 388 undergraduates were included in the analyses (Figure 2).

Table 2 provides summary information that describes the study population. The mean age [Standard deviation (SD)] for the participants was 22.2 (1.2) years and among them 204 (52.6%) were men and 184 (47.4%) were women. The distribution by age group of participants showed 54.9% aged 20-22 years, the remaining being older. A larger proportion of women were aged 20-22 years (69.0%; n= 127) compared to 42.2% (n= 86) of men in this age group, this variation being statistically significant (p-value = <0.001). The distribution of students across the three levels of study showed fewer 16.8%; n=65 were in the third year or higher of study while 58.5%; n=227 were in the second year and the remaining 24.7%; n=96 were in the first year of study, with insignificant variations by sex in year of study. Most (63.1%; n=245) were registered to the medical doctor degree programme, with 61.3% (n=125) of the men and 65.2% (n=120) of the women being so registered. Students with registration to other degree programmes (six Bachelor of Medical Laboratory Sciences programmes and the Bachelor of Sciences in Radiotherapy Technology programmes) were 36.9% (n=143) and distribution by programme registration did not vary significantly by sex.

Table 2: Distribution of socio demographic, programme registration, intimate relationships and drug use measures by sex in single undergraduate students in Dar es Salaam (N=388)

Characteristic assessed	Sex		Total n (%) n=388	Chi2 (p-value)
	Female n=184 (%)	Male n=204 (%)		
Mean Age (standard deviation)	1.31	1.58	22.2 (1.2)	--
Age groups(years)				28.19(<0.001)
20-22 years	127 (69.0)	86 (42.2)	213(54.9)	
23-24	57 (31.0)	118 (57.8)	175 (45.1)	
Level of study				2.94 (0.23)
3rd year or higher	36 (19.6)	29 (14.2)	65 (16.8)	
2nd year	100 (54.3)	127 (62.3)	227 (58.5)	
1st year	48 (26.1)	48 (23.5)	96 (24.7)	
Degree Programme				0.65 (0.42)
Medical Doctor	120 (65.2)	125 (61.3)	245 (63.1)	
Others	64 (34.8)	79 (38.7)	143 (36.9)	
Age of current girl/boyfriend				28.40(<0.001)
17-21 years	24 (13.0)	104(51.0)	128 (33.0)	
22-24 years	45 (24.5)	30(14.7)	75 (19.3)	
Do not know	68 (37.0)	63 (30.9)	131 (33.8)	
25 years and older	47 (25.5)	7 (3.4)	54 (13.9)	
Any drug use				2.51(0.11)
Yes	20 (10.9)	13 (6.4)	33 (8.5)	
No	164 (89.1)	191 (93.6)	355 (91.5)	
Boy/girlfriend use any substance				5.32 (0.02)
Yes	18 (9.8)	8 (3.9)	26 (6.7)	
No	166 (90.2)	196 (96.1)	362 (93.3)	
Who pays your fees and upkeep				2.14 (0.14)
Family/relatives	17 (9.2)	11 (5.4)	28 (7.2)	
Loan/scholarship	167 (90.8)	193 (94.6)	360 (92.8)	

About 33.8% of students reported that they don't know their partner's current age. And 33.0% of students reported their partner's current age to be 17-21 years. And 19.3% reported their partner's current age 22-24 years, 13.9% of students reported their partner's current age to be 25 years and older, this variation being statistically significant (p-value =

<0.001). Most of the students (92.8%; n=360) reported their tuition fees and upkeep was supported through a government loan or scholarship, while the remaining were supported by contributions from their parents or other relatives. The proportions of men and women receiving educational support through government loans was 94.6% (n=193) and 90.8% (n=167) respectively with insignificant variation (p=0.14).

8.2 Distribution of risk factors of interest; substance abuse, psychological status, gender equitable norms, and childhood interparental violence (IntPV)

Substance abuse and psychological status

Self-reported current (past year) use of alcohol and other substances of abuse was fairly uncommon in this study sample; the over-all self-reported rate of using alcohol or other substances of abuse was 8.5% (n=33), while rates for women were 10.9% (n=20) and for men 6.4% (n=13), (See table 2). Men and women's reports on alcohol and substance use by intimate partners (boyfriends or girlfriends) current ever use any substance of abuse were also fairly uncommon; and over-all the rate of reporting a boyfriend or girlfriend used alcohol or any substance of abuse was 6.7% (n=26); with 9.8% (n=18) of women reporting such use by their current boyfriends and 3.9% (n=8) of men reporting such use by their current girlfriend, this variation being statistical significant (p-value =0.02).

Prevalence of past 12 months dating violence (DV) exposure

Table 3 shows rates of recent (past 12 months) exposures to various forms of dating violence victimization. Emotional dating violence victimization (EDVV) was the most common form reported by 69.3% (n=269) of both women and men; with rates in women and men not varying significantly and being 71.7% (n=132) and 67.2% (n=137) respectively. Recent sexual dating violence victimization (SDVV) was reported overall by 12.1%, with men (14.2%; n=29) and women (9.8%; n=18) reporting relatively similar rates (p=0.18). The lowest overall rates were for physical forms of dating violence victimization (PDVV), with rates being 6.4% (n=25) with insignificant variations by sex, such that rates in women were 7.1% (n=13) and in men 5.9% (n=12). A sum score computed for any form of DVV showed overall 73.5% (n=285) reported in past 12 months any form of DVV, rates in women and men being 76.1% (n=140 and 71.1% (n=145) respectively.

Table 3: Distribution of past 12 months' forms of dating violence victimization (DVV) by sex in single undergraduate students in Dar es Salaam (N=388)

Past 12 months (recent) Dating Violence Victimization (DVV) measured	Sex		Total n (%) n=388	Chi Square (p-value)
	Female n=184 (%)	Male n=204 (%)		
Recent Emotional DVV (EDVV)				0.96 (0.33)
Yes EDVV	132 (71.7)	137 (67.2)	269 (69.3)	
No EDVV	52 (28.3)	67 (32.8)	119(30.7)	
Recent Sexual DVV (SDVV)				1.18 (0.28)
Yes SDVV	18 (9.8)	29 (14.2)	47 (12.1)	
No SDVV	166 (90.2)	175 (85.8)	341 (87.9)	
Recent Physical DVV (PDVV)				1.81 (0.18)
Yes PDVV	13 (7.1)	12 (5.9)	25 (6.4)	
No PDVV	171 (92.9)	192 (94.1)	363 (93.6)	
Any DVV				1.25 (0.30)
Yes	140 (76.1)	145 (71.1)	285(73.5)	
No	44 (23.9)	59 (28.9)	103(26.5)	

Table 4 summarizes by sex rates of depression, levels of self-esteem, and levels of endorsement of gender inequitable norms, childhood abuse and IntPV witnessing experiences. Overall 40.7% of undergraduates screened for symptoms equivalent to moderate to severe depression; with rates in men being 38.7% (n=79), and in women 42.9% (n=79; p-value=0.39). High self-esteem was found in 30.0% (n=109) of the participants, men with rates of 32.0% (n=62) and women 27.8% (n=47). Over-all 38.8% (n=141) of participant scored low on self-esteem; with rates in women 41.4% (n=70) being slightly higher than in men 36.6% (n=71). Overall 31.1% (n=113) score for moderate self-esteem; with rates in men 31.4% (n=61) and women 30.8% (n=52); this variation being statistical insignificance of p-value 0.17. Overall low, moderate and high levels of endorsement of gender inequitable norms were shown at rates of 41.2% (n=159), 47.2% (n=254) and 11.7% (n=45) respectively with minimal variations in these rates by sex.

Childhood abuse and IntPV exposure

The over-all rate of experience of any childhood abuse before age 15 years were reported to be 44.8% (Table 4), suggesting about half of the population studied experienced

childhood violence, rates of such violence were more frequently reported by men (54.9%; n=112) than women (33.7%; n=62; p<0.001).

Table 4: Distribution of risk factors of interest by sex in single undergraduate students in Dar es Salaam (N=388)

Characteristic assessed	Sex		Total n (%) n=388	Chi Square (p- value)
	Female n=184 (%)	Male n=204 (%)		
Probable depression				0.71 (0.39)
No to mild	105 (57.1)	125 (61.3)	230 (59.3)	
Moderate to severe	79 (42.9)	79 (38.7)	158 (40.7)	
Rosenberg self-esteem (range) *				1.07 (0.17)
Low (score <21.0)	47 (27.8)	62 (32.0)	109 (30.0)	
Moderate (score 21.0-24.0)	52 (30.8)	61 (31,4)	113 (31.1)	
High (score 25.0 + higher)	70 (41.4)	71(36.6)	141(38.8)	
Endorsement of gender inequitable norms				1.18 (0.19)
High (less than<34.4)	18 (9.8)	27 (13.3)	45(11.7)	
Moderate (34.4-42.0)	87 (47.5)	95 (46.8)	182 (47.2)	
Low (43.0 and higher)	78 (42.6)	81 (39.9)	159 (41.2)	
Any childhood abuse				17.59(<0.001)
Yes	62 (33.7)	112 (54.9)	174 (44.8)	
No	122 (66.3)	92 (45.1)	214 (55.2)	
Childhood witnessing emotional IntPV				2.44 (0.13)
Yes	38 (20.7)	56 (27.5)	94(24.2)	
No	146 (79.3)	148 (72.5)	294 (75.8)	
Childhood witnessing physical IntPV				2.44 (0.13)
Yes	38 (20.7)	56 (27.5)	94(24.2)	
No	146 (79.3)	148 (72.5)	294 (75.8)	
Childhood witnessing any form of inter-parental violence				2.83 (0.19)
Never	137 (74.5)	137 (67.2)	274 (70.6)	
Rarely (Once or twice)	15 (8.2)	25 (12.3)	40 (40.3)	
Few to many (3 or more)	32 (17.4)	42 (20.6)	74 (19.1)	

Key: * Cells totals differ due to missing response, valid N=388

About a quarter of men and women be (24.2%; n=94) reported being exposed in childhood to emotional inter-parental violence; with rates in men being 27.5% (n=56) and women 20.7% (n=38; p=0.13). Physical inter-parental violence exposure was similarly reported by 24.2% (n=94) overall with rates in men and women being 27.5% (n=56) and 20.7% (n=38; p=0.13) respectively. This suggests that incidents of emotional interparental violence often culminated in physical violence between parents, or that respondents were more likely to recall the physical inter-parental violence incidents during child hood and the associated emotional forms of violence that often precede physical altercations. Overall rate for rarely witnessing IntPV was 40.3% (n=40), men rates 12.3% (n=25) and women 8.2% (n=15). Overall rates for 3 or more times was 19.1% (n=74), 20.6 % (n=42) for men and 17.4 (n=32) for women. These variations were not statistically significant (p=0.19).

8.3 Associations between sociodemographic and other risk factors of interest with any DVV

Results in table 5 show bivariate associations between sociodemographic, relationship and psychosocial risk factors with recent exposure to any DVV. Women reported marginally significant higher rates of recent exposure to any DVV (76.1%; n=140) than men (71.1%; n=145; p=**0.05**. Higher proportions of students registered in degree programmes other than the MD programme (49.7% (n=71) and 40% (n=98) respectively) reported recent DVV exposure, this variation also being marginally significant (p=0.06). The magnitude of recent exposure to any DVV varied significantly (p=<0.001) by students reported age of their current boy/girlfriend rates being 59.4% (n=76), 66.7% (n=50), 59.3% (n=32), and 8.4% (n=11) for partners aged 17-21 years, 22-24 years, 25 years or older and the few that did not know their current boy/girlfriend's age respectively.

On the depression measure, a higher proportion (48.1%; n=76) of students with moderate to severe forms of depression compared to those with no or mild depression (40.4% n=93) reported recent exposure to DVV, though this variation was not being statistically significant (p=0.14). Students with lower levels of self-esteem reported higher, though not statistically significant, rates of recent DVV exposure (78.9%; n=86), than those with moderate 69.9%; n=79) and lower levels of self-esteem (69.5%; n=98 (p=0.20).

Table 5: Association between DVV and socio demographic and risk other risk factor in single undergraduate students in Dar es Salaam (N=388)

Characteristic assessed	Any recent DVV		Total n (%) N=388	Chi square(p-value)
	Yes	No		
Age (years)				0.03 (0.87)
20-22	92 (43.2)	121 (56.8)	213 (100)	
23-24	77(44.0)	98 (56.0)	175 (100)	
Sex				1.25(0.05)
Female	140 (76.1)	44 (23.9)	184 (100)	
Male	145 (71.1)	59 (28.9)	204 (100)	
Year of study				2.23 (0.33)
1st	37(38.5)	59 (61.5)	96 (100)	
2nd	106 (46.7)	121 (53.3)	227 (100)	
3rd year or higher	26 (40.0)	39 (60.0)	65 (100)	
Who pays tuition and upkeep				0.01 (0.94)
Loans/scholarship	157 (43.6)	203 (56.4)	360 (100)	
Family/relatives	12 (42.9)	16 (57.1)	28 (100)	
Age of current boy/girlfriend				1.66(<0.001)
17-21 years	76 (59.4)	52 (40.6)	128 (100)	
22-24 years	50 (66.7)	25 (33.3)	75 (100)	
Do not know	11 (8.4)	120 (91.6)	131 (100)	
25 years and older	32 (59.3)	22 (40.7)	54 (100)	
Boy/girlfriend uses any drug				2.27 (0.13)
Yes	15 (57.7)	11 (42.3)	26 (100)	
No	154 (42.5)	208 (57.7)	362 (100)	
Any drug use by participant				0.19 (0.89)
No	155 (43.7)	200 (56.3)	355 (100)	
Yes	14 (42.7)	19 (57.6)	33 (100)	
Probable depression				2.24 (0.14)
None to mild	93 (40.4)	137 (59.6)	230 (100)	
Moderate to severe	76 (48.1)	82 (51.9)	158 (100)	
Self -esteem*				3.25 (0.20)
Low (<21.0)	86 (78.9)	23 (21.1)	109 (100)	
Moderate (21.0-24.0)	79 (69.9)	34 (30.1)	113 (100)	
High (25.0 + higher)	98 (69.5)	43 (30.5)	141(100)	
Endorsement of gender inequitable norms				1.81(0.09)
High (less than<34.4)	35 (77.8)	10 (22.2)	45 (100)	
Moderate (34.4-42.0)	137 (75.3)	45 (24.7)	182 (100)	
Low (43.0 and higher)	111 (69.8)	48 (30.2)	159 (100)	

Characteristic assessed	Any recent DVV		Total n (%) N=388	Chi square(p-value)
	Yes	No		
Degree programmes				3.42 (0.06)
Others	71 (49.7)	72 (50.3)	143 (100)	
Medical Doctors	98 (40.0)	147 (60.0)	245 (100)	
Childhood abuse				3.42 (0.06)
Yes	89 (51.1)	85 (48.9)	174 (100)	
No	80 (37.4)	134 (62.6)	214 (100)	
Childhood IntPV witnessing				1.26 (0.04)
Never	199 (72.6)	75 (27.4)	274 (100)	
Rarely (Once or twice)	28 (70.0)	12 (30.0)	40 (100)	
Few to many (3 times or more)	58 (78.4)	16 (21.6)	74 (100)	

Key: * Cells totals differ due to missing response, valid N=388

On the other hand, having high endorsement of gender inequitable norms, compared to moderate and lower endorsement was associated with higher rates of recent DVV exposure as evidenced by rates of 77.8% (n=35), 75.3% (n=137) and 69.8% (n=111) respectively; these variations being marginally statistically significant (p=0.09) and positive for trend at p-value 0.05. About 51.1% (n=89) of students reporting childhood abuse compared to 37.4% (n=80) of those not reporting such abuse had any recent DVV exposure this variation being marginally significant p=0.06. In students reporting witnessing any IntPV in childhood at frequencies of three or more times, 78.4% (n=58) reported any DVV exposure, while rates were 70.0% (n=28) and 72.6% (n=199) in those reporting this experience once or twice and never respectively; these variations being statistically significant (p=0.04).

Logistic regression analyses were performed to determine independent risk factors for recent DVV as well as determining whether there was any effect modification due to associations between risk factors. In order to make these determinations the strengths of associations between risk factors and recent DVV were explored in both unadjusted and adjusted analyses. A full effects model was used where risk factors identified in bivariate analyses with p-values ≤ 0.2 were included in the model as summarized in Table 6. In these analyses risk factors adjusted for included participants sex and registered degree program, age of their partners, use of drugs by current partner, participant's levels of

depression and self-esteem, participant's endorsement of inequitable gender norms, reported abuse during childhood as well as witnessing of interparental violence.

The full effects model showed, lack of familiarity with a sexual partner measured using a proxy of knowledge of current partner's age, and moderate compared to high self esteem showed associations with current DVV. Not knowing the age of a sexual partner compared to partners being aged 25 years or older was independently protective against recent DVV, reducing the likelihood of DVV by 79% (OR 0.21; 95% CI 0.08, 0.52; p=0.001). Furthermore, moderate compared to higher levels of self-esteem (OR 0.83; 95% CI 0.46, 1.49; p=0.07) was unexpectedly protective, decreasing marginally the likelihood of reporting DVV in men by 17%. In these adjusted analyses, no other risk factors showed significant associations with DVV.

However, due to significant variations in these risk factors by sex, the likelihood of effect modification due to sex was suspected and determined for self esteem. Also, literature exists showing potential differential effects by sex of risk factors of exposure to dating violence. Logistic regression analyses were hence desegregated by sex and findings are summarized in Table 7. These analyses show that not knowing one's partner's age compared to having a partner aged 25 years and older was similarly protective against DVV occurrence in men than women, reducing the likelihood of such violence by 89% in men (OR 0.11; 95% CI 0.02-0.75 p=0.02) and 78% in women (OR 0.22; 95% CI 0.07-0.75 p=0.02). Furthermore, in adjusted analyses, moderate compared to high self-esteem was differentially associated with DVV occurrence by sex, increasing by almost two and a half times the likelihood of DVV occurrence in men (OR 2.43 95% CI 0.99-5.93 p=0.05), while variations in self-esteem in women were not significantly associated with DVV occurrence in women (OR 1.38 95% CI 0.50-3.86 p=0.54). Holding moderate, as opposed to high gender inequitable norms was also associated differentially with DVV by sex, moderate as opposed to high gender inequitable norms reducing by 59% (OR 0.41; 95% CI 0.20, 0.86; p=0.02) the likelihood of DVV in men but not in women, where moderate compared to highly held inequitable norms actually increased by 40% the risk of DVV though this effect was not significant (OR 1.40; 95% CI 0.61, 3.24; p=0.43). Finally, significant association between being registered in a programme other than the Medical Doctor degree

programme and childhood abuse were no longer associated with DVV in this analysis, suggesting perhaps other variables such as self-esteem and holding of gender inequitable norms operate differentially by sex and may mediate potential associations between DVV and more distal risk factors such as childhood sexual abuse and witnessing IntPV.

Table 6: Unadjusted and adjusted low (score 25.0 + higher) analysis between risk factors of interest and any DVV in single undergraduate students in Dar es Salaam (N=388)

Characteristic assessed	Any DVV* n (%)	Unadjusted Odds Ratio (95% CI)	p-value	Adjusted Odds Ratio (95% CI)	p-value
Sex					
Female	140 (76.1)	1.30 (0.82-2.04)	0.05	0.88 (0.49-1.58)	0.66
Male	145 (71.1)	1.00		1.00	
Age of current girl/boy friend					
17-21 years	76 (59.4)	5.27 (2.68-10.36)	<0.001	1.41 (0.61-3.29)	0.42
22-24 years	50 (66.7)	4.54 (2.15-9.58)	<0.001	1.08 (0.49-2.37)	0.85
Does not know	11 (8.4)	4.54 (2.15-9.58)	<0.001	0.21 (0.08-0.52)	0.001
25 years and older	32 (59.3)	1.00		1.00	
Boy/girlfriend uses any drug					
No	154 (42.5)	0.74 (0.52- 1.05)	0.13	1.50(0.60-3.75)	0.39
Yes	362 (93.3)	1.00		1.00	
Probable depression					
None or mild	93 (40.4)	0.84 (0.67-1.05)	0.14	0.87 (0.51-1.49)	0.62
Moderate to severe	76 (48.1)	1.00		1.00	
Self-esteem					
Low (score <21.0)	86 (78.9)	0.61 (0.34-1.09)	0.09	0.57 (0.31-1.05)	0.19
Moderate (score 21.0-24.0)	79 (69.9)	0.98 (0.57-1.68)	0.94	0.83 (0.46-1.49)	0.07
High (score 25.0 + higher)	98 (69.5)	1.00		1.00	

Characteristic assessed	Any DVV* n (%)	Unadjusted Odds Ratio (95% CI)	p-value	Adjusted Odds Ratio (95% CI)	p-value
Endorsement gender inequitable norms					
High (less than<34.4)	35 (77.8)	0.66 (0.30-1.44)	0.30	0.65 (0.28-1.49)	0.31
Moderate (34.4-42.0)	137 (75.3)	0.76(0.47-1.23)	0.26	0.77 (0.46-1.30)	0.33
Low (43.0 and higher)	111 (69.8)	1.00		1.00	
Degree programme					
Other	71 (49.7)	1.48 (0.98-2.24)	0.07	1.22 (0.73-2.02)	0.45
Medical doctors	98 (40.0)	1.00		1.00	
Childhood abuse					
No	80 (37.4)	0.73 (0.38- 0.86)	0.007	0.79 (0.46-1.33)	0.37
Yes	89 (51.1)	1.00		1.00	
Childhood IntPV witnessing					
Never	199 (72.6)	1.37 (0.74-2.52)	0.32	1.19 (0.54-2.61)	0.67
Rarely (Once or twice)	28 (70.0)	1.55 (0.65-3.72)	0.32	0.74 0.38-1.44)	0.37
Few to many (3 or more times)	58 (78.4)	1.00		1.00	

Key: * Totals less than 388 are due to missing responses

Table 7: Adjusted associations between risk factors of interest and DVV disaggregated by sex in single undergraduate students in Dar es Salaam (N=388)

Risk Factors	Females			Men		
	N=184*	DVV n (%)	Adjusted OR (95% CI); p-value	N=204*	DVV n (%)	Adjusted OR (95% CI); p-value
Age of current girl/boy friend						
17-21 years	24	17 (70.8)	1.18 (0.33-4.25);0.80	104	64 (61.5)	0.91 (0.17-5.00); 0.92
22-24 years	45	29 (64.4)	1.29 (0.51-3.28);0.59	30	21 (70.0)	0.57 (0.09-3.56); 0.54
Does not know	68	62 (91.2)	0.22 (0.07-0.75);0.02	63	56 (88.9)	0.11 (0.02-0.75); 0.02
25 years and older	47	32 (68.1)	1.00	7	4 (57.1)	1.00
Boy/girlfriend uses any drug						
No	166	130 (78.3)	1.00	196	139 (70.9)	1.00
Yes	18	10 (55.6)	1.75 (0.55-5.61);0.35	8	6 (75.0)	0.99 (0.16-5.98);0.99
Probable depression						
None or mild	105	76 (72.4)	0.63 (0.26-1.50);0.29	125	89 (71.2)	1.30 (0.62-2.70);0.49
Moderate to severe	79	64 (81.0)	1.00	79	56 (70.9)	1.00
Self-esteem						
Low (score <21.0)	47	38 (80.9)	1.56 (0.55-4.44); 0.40	62	48 (77.4)	1.44 (0.60-3.45); 0.41
Moderate (score 21.0-24.0)	52	36 (69.2)	1.38 (0.50-3.86); 0.54	61	43 (70.5)	2.43 (0.99-5.93); 0.05
High (score 25.0 + higher)	70	52 (74.3)	1.00	71	46 (64.8)	1.00
Endorsement of gender inequitable norms						
High (less than<34.4)	18	14 (77.8)	0.79 (0.20-3.16);0.73	27	21 (77.8)	0.56 (0.18-1.70); 0.30
Moderate (34.4-42.0)	87	63 (72.4)	1.40 (0.61-3.24); 0.43	95	74 (77.9)	0.41 (0.20-0.86); 0.02
Low (43.0 and higher)	78	62 (79.5)	1.00	81	49 (60.5)	1.00

Risk Factors	Females			Men		
	N=184*	DVV n (%)	Adjusted OR (95% CI); p-value	N=204*	DVV n (%)	Adjusted OR (95% CI); p-value
Degree programme						
Other	64	44 (68.8)	1.53 (0.69-3.40);0.30	79	56 (70.9)	0.99 (0.48-2.00);0.97
Medical doctors	120	96 (80.0)	1.00	125	89 (71.2)	1.00
Childhood abuse						
No	122	91 (74.6)	0.75 (0.32-1.76); 0.50	92	65 (70.7)	0.78 (0.38-1.60); 0.50
Yes	62	49 (79.0)	1.00	112	80 (71.4)	1.00
Childhood IntPV witnessing						
Never	137	103 (75.2)	1.00	137	96 (70.1)	1.00
Rarely (Once or twice)	15	9 (60.0)	1.61 (0.45-5.81); 0.47	25	19 (76.0)	0.99 (0.32-3.04); 0.98
Few to many (3 or more times)	32	28 (87.5)	0.40 (0.12-1.33); 0.14	42	30 (71.4)	0.10 (0.49-2.96); 0.69

Key: *Totals less than 184 for women and 204 for men are due to missing responses

9.0 DISCUSSION

This study aimed to determine the prevalence of recent DVV (past 12 months) in undergraduates aged 20-24 years, determine their psychological status (depression, self-esteem and alcohol use) and exposure to childhood adversities as well as determine the association between exposure to childhood adversities, including witnessing IntPV, and other potential risk factors with any recent exposure to DVV.

Overall rates of past 12 months DVV in this study were 73.5% and comparable to what has been observed elsewhere. Rates of recent (past 12 months) emotional, sexual and physical dating violence victimization were 69.3%, 12.1% and 6.7% respectively. The much higher rates of emotional compared to other forms of DVV in University students are similar to those reported by both African and non-African studies(Umana et al., 2014; Shorey et al., 2012; Lehrer, Lehrer & Zhao, 2009),and Shorey et al., 2012 for example, in Chilean (sample aged 18-30 years two thirds 21 years and younger) and USA university students (found rates of any emotional DVV in women and men of 67.3% - 82.0% and 79.9% - 87% respectively with rates by gender for physical DVV being 15.1% -22.0% and 20.0% - 26.6% respectively, and only the US study reported sexual violence victimization (SVV) at rates amongst women of 39.0% and men of 30.0%. In the African context, a Nigerian study showed similarly higher rates of psychological versus physical and SVV with rates of 41.8%, 7.9%, and 6.6% respectively, infemale university students most of whom were below 25 years(74.5%). Hence in university students, it would appear that higher rates of emotional compared to physical and sexual dating violence may be a common phenomenon across localities and cultural groups globally.

The high rates of dating violence victimization in university students while similar to Western rates were lower than rates reported in the only African study retrieved. (Umana et al., 2014) in Nigeria reported IPV victimization in female university students of 41.8% for psychological (emotional) violence, and 7.9% and 6.6% for physical and sexual violence victimization respectively. Umana et al., (2014), however made no distinction by marital status of students, and the population studied ranged in age from less than 20 years to more than 35 years, while this study focuses on single, never married, male and female students aged 20-24 years. The younger age of students in this study could explain the

relatively higher rates of DVV as maturity in terms of developed impulse control and emotional regulation may be protective against DVV. Some evidence shows better stress coping mechanisms in older compared to young University students in the African context with the former more likely to use problem-solving, cognitive restructuring and express emotion coping strategies than younger colleagues Roudsari, Leahy, & Walters, (2009) as cited by Kaukinen, (2014).

Amongst the variables related to the participant's recent intimate relationship, this study shows in bivariate analysis a greater risk of DVV when partners are younger compared to older. In adjusted analyses, this relationship is no longer significant except for participants reporting they did not know their partner's ages, where this had a protective effect in the main effects and sex disaggregated analyses when compared to those reporting having an older partner aged 25 years and older. While literature is limited on relationships between a partner's age and occurrence of DV in general or DVV specifically, it is likely that not knowing a current partners age may be a proxy measure for a more causal relationship or a relationship with minimal emotional investment. Some studies have shown that dating violence happens more readily in committed relationships than in causal relationships Katz, Kuffel and Coblentz, (2002) as cited by Kaura & Lohman, (2007)). In understanding similarities between IPV and DV, Shorey et al., (2012), also notes higher violence vulnerability in both types of partner violence when familiarity with each other is high and partners share substantial personal information; furthermore Cleveland, Herrera, & Stuewig, (2003) report on the possible mediating role of relationship seriousness on the influence of some individual-level characteristics for occurrence of abuse in relationships in adolescents. While the explanation that not knowing a partners age may be a proxy measure for low levels of familiarity and emotional commitment between couples seems plausible, this explanation may need further study in the Tanzanian context.

Rates of reported alcohol and other substance use by study participants were at 8.5% and 6.7% reported such use by a current partner. In these analyses associations between alcohol and drug use by the participant or an intimate partner was not associated with DVV and bivariate and multivariate analysis. At least one study in a college sample suggests high-risk heavy drinking is a risk factor for both DVV and perpetration, Roudsari, Leahy,

& Walters, (2009) as cited by Kaukinen, (2014), and dating violence has been considered within a cluster of non-prosocial behaviors that occur together and includes alcohol and other substance abuse (Cleveland et al., 2003) and mechanisms of the association between alcohol use and DV is postulated as either being through impacts on the ability to resist unwanted physical or sexual advances and to prevent a young person from being able to interpret warning cues of a potential violence Gidycz et al., (2007) as cited by Stappenbeck & Fromme, (2010) or as self-medication to cope with the trauma of violence (Lormand et al., 2013). In our assessment of alcohol use, a positive response to any of the RAPS-4 items was considered probable alcohol misuse, given the low numbers of students that reported such use; this could explain the lack of associations with DVV in this study. It is also possible that university students in a health professionals training institution, may under-report their alcohol use.

This study also aimed to explore rates of psychological status measures in a sample of Tanzanian university students. The findings show significant levels of moderate to severe symptoms of depression equivalent to DSM IV TR major depression diagnosis using the PHQ-9 as a screening tool, among 20-24 years old and a locally calibrated cut-off score of 9 to determine clinically significant depression. Overall 40.7% of students screened positive for probable depression, with rates being similarly high in women and men. These findings appear slightly higher than rates found in other studies in University student populations. For example, rates of depression in University students(Iowa State University,University of Illinois, and Ohio State University) have been reported to range between 10.8 % to 48%, (Kaura & Lohman, 2007; Holt & Espelage, 2005&Bonomi et al., 2013); however, the differences in rates could be due to different measures used to determine depression across studies. In the study by Kaura & Lohman, (2007) for example the BSI-18, a screening tool that does not have the interpretive complexity of longer mental health tests and without a calibrated cut off score for caseness, reported a depression rate of 10.8% that may not have been accurate. Because depression screening tools, such as the BSI and PHQ-9, tend to over-estimate rates of depression, the possibility that rates of depression established in university students by this study using a screening tool calibarated for caseness against a ‘gold standard’ are higher than those established by the quoted studies remains.

Moderate compared to high self-esteem was independently but marginaly protective against DVV in men but not women in the full effects logistic regression model; however, in sex disaggregated logistic regression analyses, the association between moderate compared to high levels of self-esteem occurred in the opposite direction increasing the odds by almost two and a half times of men reporting DVV (p=0.05), and by only 38% (p=0.54) in women; suggesting effects in the overall sample multivariate analysis were modified by sex. Very few studies could be retrieved that explore associations between self-esteem and DVV, or of self-esteem as an important risk factor. At least one study was retrievable which did not find associations between self-esteem and DV in an adolescent population Cleveland et al., (2003). However, at least one study found that low self-esteem mediates partially associations between parenting processes and dating violence in an adolescent sample this link being contingent on socio-economic status of the participants, Pfieger and Vazsonyi, (2006) as cited by Paat & Markham, (2016). Given the cross-sectional nature of this study it is not possible to determine cause or effects relationship between self-esteem and DVV. Future longitudinal studies would be important to better understand the causal direction of this association.

In these analyses, depression did not predict DVV; with multivariate and bivariate analysis showing none to mild compared to moderate to severe depression decreased the likelihood of reporting recent DVV by 13% (p=0.62 and 16% (p=0.14) respectively. The non-significant variations are contrary to findings from other studies; for example, in a study of university students in the US, Kaura & Lohman, (2007) showed using hierarchical regression models that the depression as an outcome was significantly higher in, particularly non-Caucasian students reporting DVV and acceptance of female-male violence. Furthermore, other studies show adult women accessing primary health care services, report a four times higher likelihood of depressive symptoms when they are victims of DVV compared to non-victims (Carlson, Nutt, & Choi, 2003). A likely explanation for lack of association between depression and DVV may be cultural; acceptance of unequal gender power relationships in the Tanzanian cultural setting may result in different outcomes with regards to depressive symptomatology; as lack of associations were also noted in findings for both men and women. It is also likely that emotional investment or commitment in intimate relationships in this population may not

be very high and this may in some way be protective against emotional decompensation when DVV occurs. Further studies are required to better explain this lack of expected association

Finally, in only the logistic regression model dissagregated by sex, holding moderate compared to high gender-inequitable norms was protective, reducing likelihood of reporting DVV by 59% (p=0.02) in men but increased the odds in women by 40% though these findings were not significant. This suggests in a context where male dominance occurs in intimate relationships, males holding less gender inequitable norms and less likely to experience conflict and hence DVV from their intimate partners; however, women may be less fortunate when challenging a male dominant status quo. These findings may be specific to the African context and similar studies exploring gender equitable or inequitable norms as risk factors for DVV could not be retrieved.

Family of origin violence measures show in bivariate analyses that absence of childhood abuse (reported by 55.2%) was protective, reducing the odds of reporting DVV by 27% (p=0.007). While this protective effect was noted, in multivariate analyses it was not significant for the total sample as well as in sex disegregated analyses. Witnessing parental violence during childhood, reported by 59.4% of the students surveyed was also not associated with recent DVV in both bivariate and univariate analyses. In this study, high rates endorsement of gender inequitable norms was a risk factor for men than women, reason may be because we are more sensitive to protect girls than boys. Studies in the African context also find in university students high rates of child abuse, for example rates of 28.2% are reported from Nigeria by Umana et al of childhood abuse, which witnessing interparental violence in childhood has been reported by between 17.7% to 28% of young adults in Kenya and Nigeria (Umana et al., 2014). A longitudinal study in the US that followed up young adolescents to age 17-19 years, noted parental conflicts and hostility predicted violence in the older adolescents romantic relatioships. Both cross-sectional studies with African samples including women and university students showed associations between witnessing IntPV and DVV; in the Nigerian random sample of 255 Ibadan university students, unadjusted analyses showed a 40% higher likelihood of experiencing recent (past 12 months) violence in relationships if they reported witnessing

inter-parental violence in childhood (Umana et al., 2014), however adjusted analyses were not conducted; this study also differs by sampling married students, postgraduate and undergraduate students and hence was measuring IPV to greater extent than DVV.

There may be several other reasons why in this study associations were not found between family of origin violence variables and DVV. Firstly, the study design required recall of events occurring in childhood, and this could have resulted in recall bias, either due to forgetting or suppressing experiences that might have been traumatic. Secondly, the mechanism of the relationship between childhood adversities associated with violence, and DVV during adulthood is not yet clearly understood, and some authors have noted the paucity of research on factors that are protective for DV (Kaukinen, 2014). Some of these protective factors have been reported in a recent review by (Vagi et al., 2013) and were not explored in this study, including there is evidence for a number of protective factors that mediate this direct relationship including at an individual level, recognition of the wrongness of perpetrating violence, high empathy, better grades, higher verbal IQ; and at an interpersonal level, positive relationship with one's mother, and feeling a sense of attachment to one's school. Hence, while social learning theory is one theory put forward to explain the mechanisms by which family of origin violence begets DV, experiences during childhood and early adolescence may attenuate such learning or factors that facilitate resilience in the child may mitigate effects of early exposures on future violence victimization in intimate relationships. By virtue of being University students, unmeasured socio-economic advantage as well as resilience factors may be in play, explaining the lack of associations between family of origin violence exposures and DVV. Finally, gender inequities in the power dynamics of intimate relationships common in this context if not sustained may also be an important mediator of associations between family of origin violence exposures and DVV. In these analyses, only 11.7% of participants endorsed gender inequitable norms that support male entitlement in the dynamics of relationships; with very similar rates in women (9.8%) and men (13.3%; p=0.19). Previous studies documents that holding gender inequalities fosters DVV (Umana et al., 2014; Paat y, &Markham C, 2016, Nabors, 2010). It is also likely that the population studied of University students, registered to health professional training programmes, may have had a development process characterized by more resilience and hence able to overcome

negative impacts of childhood adversities. Understanding what these resilience characteristics may have been is beyond the scope of this study, and perhaps should be considered in future studies.

9.1 Nature and Limitations of the Study

Strengths:

A descriptive cross-sectional study was conducted, that was simple in design and aimed at finding out the prevalence of a various phenomenon, experiences and attitudes by taking a cross-section of the population of interest. In the study context where very little is known of the extent of exposure to family of origin violence, experiences of DVV and rates of some of the risk factors explored including psychological status amongst university students. The results in terms of these observations hence remain invaluable. Findings provided a preliminary descriptive examination of the perceptions and experiences of 404 male and female University students who witnessed IntPV versus not. This has as yet not been examined in Tanzania context.

Limitations and Mitigation Among the limitations identified early during the proposal development was to phrase and adjust some questions to capture needs in the Tanzanian universities cultural context. The aim was to ensure or minimize misconceptions that could arise from the way questions were phrased, especially because a self-report questionnaire was used to collect data. Despite this mitigation attempt recall bias is a real limitation. Response to questions that bring back painful memories including those regarding traumatic experiences, violence and threat may be limited by recall bias (Bonomi et al., 2013).

The quantitative nature of thisstudy also means to some extent interpretation of what some items asked meant may have varied amongst respondents.

A second limitation is that the data in this study are cross-sectional (i.e., one-time assessment). That is, it is possible that low self-esteem is a risk factor for victimization or a consequence of victimization, or both. As long as this is a cross-sectional (prevalence study), the design has possibly inherent weakness in evaluating temporal relationship between, for example IntPV and childhood abuse with the outcome (DV), particularly

when one considers the recall bias inherent in remembering events in childhood. Therefore, it was difficult from the result to clearly associations and their direction of association. Despite these limitations useful information is provided for the conceptualization of improvements in future studies.

Self-reporting on sensitive sexual related behaviors may have resulted in desirability bias. Some of young adults before marriage may feel the necessity to respond in socially acceptable ways because premarital sex and relationships is culturally frowned upon. Assurance of confidentiality by participant information being unlinked to their names or their identity, and the strategy of using self-administered questionnaires rather than face to face interviews may have mitigated somewhat desirability biases.

10.0 CONCLUSION AND RECOMMENDATIONS

This study concludes that independent and protective associations exist between reporting DVV in men and moderate compared to lower self-esteem, as well as holding moderate compared to high gender-inequitable norms. In both men and women, not knowing a partner's age was protective against reporting DVV, suggesting more safety in relationships where commitment and emotional investment in the relationship is perhaps low; as partners are less well known to each other.

In these analyses in contrast to observations elsewhere, witnessing IntPV or CA were not associated with reporting current DVV. Steps towards primary prevention of DVV should therefore focusing on reducing gender inequitable norms, interventions that build students self esteem and providing skills for respectful relationships with the opposite sex.

10.1 Implications for future researchers, practitioners and policy makers

These findings open up questions for future study to understand the quality of romantic/intimate relationships in single university students in order to develop tools that better measure relationship quality as a potential risk factor for DVV. Not much has been studied both locally and internationally on factors that may protect individualsfrom both inter-generational transmission of violence in intimate relationships such as successful coping strategies after exposure to traumatic events in childhood. Finally, with adequate tools for measuring phenomenon of interest, longitudinal studies would usefully explore the causal pathways from family of origin violence exposure to DVV amongst young adults. Information from such recommended future studies will go a long way towards informing interventions to reduce DVV.

Better study designs such as longitudinal cohort studies are required to assess relationships between witnessing IntPV and other childhood exposure to gender-based violence and DVV during young adulthood.

The percentages of University students who are victims of DVV calls for increased efforts to address those behaviors as serious problems at Universities and create understanding among University undergraduates that violence exposure is one of the most common and severe source of human stress. Therefore, steps towards primary prevention of DVV

should include start efforts to end all IntPV and CA which requires initiation in parental education efforts, schools and college awareness on issues patterning dating violence. Thesis will be available in the MUHAS data repository that is available online. This point of dissemination will constitute important get-keepers who can further disseminate and share study findings and build on them through more research and the practice of improved university students' welfare.

Dating violence prevention programs that attempt to enhance students' knowledge about dynamics of dating violence, will be helpful in modifying students 'attitudes towards members of the opposite sex and respectful dating relationships. Empowering students to make healthy choices in relationships and to recognize and avoid the dynamics of violent relationships.

11.0 DISSEMINATION PLAN

Dissemination will be a planned process that involves consideration of feedback of research findings from a target audience from the community where the study was conducted, the scientific community and other relevant setting in which research findings are to be received. Where appropriate, communicating and interacting with wider policy and health service audiences in ways that facilitates both research findings uptake into decision-making processes and practices as well as generation of next steps research questions.

The principle audiences for this study's findings are; members of psychiatry department who agreed to the need for such information, MUHAS as the owner of the research and the main facilitator, the community of students at MUHAS as participants; and the wider scientific community in the form of journal publications and abstracts submitted for presentation at relevant scientific conferences. The thesis will also be made available in the MUHAS data repository that is available online. These points of dissemination will constitute important gate-keepers who can further disseminate and share study findings and build on them through more research and the practice of improved university student's welfare.

REFERENCES

Amar, A. F., & Gennaro, S. (2005). Dating violence in college women. *Nursing Research*, *54*(4), 235–242. http://doi.org/10.1097/00006199-200507000-00005

Bandura, A. (1973). Social learning theory of aggression. In J.F.Knutson (Ed), The control of aggression: Implication from basic research. Chicago: Aldine.

Bandura, A. (1971). Social learning theory. *Social Learning Theory*. http://doi.org/10.1111/j.1460-2466.1978.tb01621.x

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, *84*(2), 191–215. http://doi.org/10.1037/0033-295X.84.2.191

Baumgartner, J. N., Kaaya, S., Karungula, H., Kaale, A., Headley, J., & Tolley, E. (2015). Domestic Violence Among Adolescents in HIV Prevention Research in Tanzania: Participant Experiences and Measurement Issues. *Maternal and Child Health Journal*, *19*(1), 33–39. http://doi.org/10.1007/s10995-014-1492-1

Black, M. C., & Breiding, M. J. (2008). Adverse health conditions and health risk behaviors associated with intimate partner violence — United States, 2005. *Journal of the American Medical Association*, *300*(5), 646–649.

Bonomi, A. E., Anderson, M. L., Nemeth, J., Rivara, F. P., & Buettner, C. (2013). History of dating violence and the association with late adolescent health. *BMC Public Health*, *13*(1), 821. http://doi.org/10.1186/1471-2458-13-821

Carlson, B. E., Nutt, L. M. C., & Choi, D. Y. (2003). Childhood and Adult Abuse Among Women in Primary Health Care Effects on Mental Health, *18*(8). http://doi.org/10.1177/0886260503253882

Cleveland, H. H., Herrera, V. M., & Stuewig, J. (2003). Abusive Males and Abused Females in Adolescent Relationships: Risk Factor Similarity and Dissimilarity and the Role of Relationship Seriousness. *Journal of Family Violence*, *18*(6), 325–339. http://doi.org/10.1023/A:1026297515314

Cornelius, T. L., & Resseguie, N. (2007). Primary and secondary prevention programs for dating violence: A review of the literature. *Aggression and Violent Behavior*, *12*(3), 364–375. http://doi.org/10.1016/j.avb.2006.09.006

Douglas, E. M., Straus, A. M. (2006). Assault and injury of dating partners by University students in 19 countries and its relation to corporal punishment experienced as a child. *European Journal of Criminology*, *3*(3), 293–318. http://doi.org/10.1177/1477370806065584

Exner-Cortens, D., Eckenrode, J., & Rothman, E. (2012). Longitudinal associations between teen dating violence victimization and adverse health outcomes. *Pediatrics*, *131*(1), 71–78. http://doi.org/10.1542/peds.2012-1029

Foshee, V. A. Benefield, T. S. Reyes, M, H. L., Ennett, S. T. Faris, R. Chang, L. Hussong, A. and Suchindran, C. . (2013). The peer context and the development of the perpetration of adolescent dating violence. *Journal of Youth and Adolescence*, *42*(4), 997–1003. http://doi.org/10.1016/j.biotechadv.2011.08.021.Secreted

Foshee, V. A. (1996). Gender differences in adolescent dating abuse prevalence, types and injuries. *Health Education Research*, *11*(3), 275–286. http://doi.org/10.1093/her/11.3.275-a

Fossos, N., Neighbors, C., Kaysen, D., & Hove, M. C. (2007). Intimate partner violence perpetration and problem drinking among college students: The roles of expectancies and subjective evaluations of alcohol aggression. *Journal of Studies on Alcohol and Drugs*, *68*(5), 706–713. http://doi.org/10.1016/j.bbi.2008.05.010

García-moreno, C. (2005). *WHO Multi-country Study on Women's Health and Domestic Violence against Women*.

Harned, M. S. (2001). Abused women or abused men? An examination of the context and outcomes of dating violence. *Violence and Victims*, *16*(3), 269–285.

Holt, M.K., & Espelage, D. L. (2005). Social support as a moderator between dating violence victimization and depression/anxiety among African American and

Caucasian adolescents. *School Psychology Review*, *34*(3), 309–328.

Houston, J. (2012). *Effects of violence on youths perceptions of peer and sibling aggression*. Marquette University.

Kahane et al., (2006), Child abuse and neglect in UK today. *Resaerch report*

Kalmuss, D. (1984). The Intergenerational transmission of marital aggression. Journal of marriage and the family, 46 (1), 11-19

Kaukinen, C. (2014). Dating violence among college students: the risk and protective factors. *Trauma, Violence & Abuse*, *15*(4), 283–96. http://doi.org/10.1177/1524838014521321

Kaura, S. A., & Lohman, B. J. (2007). Dating violence victimization, relationship satisfaction, mental health problems, and acceptability of Violence: A comparison of men and women. *Journal of Family Violence*, *22*(6), 367–381. http://doi.org/10.1007/s10896-007-9092-0

Khaemba, M. E. A. (2014). *Childhood exposure to inter-parental violence as a risk factor for intimate partner violence -A study on women in resource-limited settings in Nairobi, Kenya*.

Lary, H., Maman, S., Katebalila, M. McCauley, A. and Mbwambo, J. (2004). Exploring the association between HIV and violence: young people ' s experiences with infidelity , violence and forced sex in Dar es Salaam , Tanzania. *International Family Planning Perspectives*, 200–206.

Lehrer, J. a, Lehrer, E. L., & Zhao, Z. (2009). Physical and psychological dating violence in young men and women in Chile: results from a 2005 survey of university students. *International Journal of Injury Control and Safety Promotion*, *16*(4), 205–214. http://doi.org/10.1080/17457300903307003

Lehrer, J. a, Lehrer, E. L., & Zhao, Z. (2010). Physical dating violence victimization in college women in Chile. *Journal of Women's Health (2002)*, *19*(5), 893–902.

http://doi.org/10.1089/jwh.2009.1583

Lormand, D. K., Markham, C. M., Peskin, M. F., Byrd, T. L., Addy, R. C., Baumler, E., & Tortolero, S. R. (2013). Dating Violence Among Urban, Minority, Middle School Youth and Associated Sexual Risk Behaviors and Substance Use. *J Sch Health*, *83*(6), 415–421. http://doi.org/10.1111/josh.12045.Dating

Makepeace, J. M. (1981). Courthship violence among college students. *Family Relations*, *30*(1), 97–102.

Maman, S., Mbwambo, J. K., Hogan, N. M., Kilonzo, G. P., Campbell, J. C., Weiss, E., & Sweat, M. D. (2002). HIV-positive women report more lifetime partner violence: findings from a voluntary counseling and testing clinic in Dar es Salaam, Tanzania. *American Journal of Public Health*, *92*(8), 1331–1337. http://doi.org/10.2105/AJPH.92.8.1331

Monahan, P. O., Shacham, E., Reece, M., Kroenke, K., Ong'Or, W. O., Omollo, O., … Ojwang, C. (2008). Validity/reliability of PHQ-9 and PHQ-2 depression scales among adults living with HIV/AIDS in Western Kenya. *Journal of General Internal Medicine*, *24*(2), 189–197. http://doi.org/10.1007/s11606-008-0846-z

Muñoz-Rivas, M. J., Graña, J. L., O'Leary, K. D., & González, M. P. (2007). Aggression in adolescent dating relationships: Prevalence, justification, and health consequences. *Journal of Adolescent Health*, *40*(4), 298–304. http://doi.org/10.1016/j.jadohealth.2006.11.137

Nabors, E. L. (2010). Drug Use and Intimate Partner Violence Among College Students : An In-Depth Exploration. http://doi.org/10.1177/0886260509340543

Oshri, A., Sutton, T. E., Clay-Warner, J., & Miller, J. D. (2015). Child maltreatment types and risk behaviors: Associations with attachment style and emotion regulation dimensions. *Personality and Individual Differences*, *73*(August 2015), 127–133. http://doi.org/10.1016/j.paid.2014.09.015

Paat, Y.-F., & Markham, C. (2016). The roles of family factors and relationship dynamics on Dating Violence Victimization and Perpetration Among College Men and Women in Emerging Adulthood. *Journal of Interpersonal Violence*, *25*(8), 793–811. http://doi.org/10.1177/0886260516640544

Pulerwitz, J., & Barker, G. (2007). Measuring Attitudes toward Gender Norms among Young Men in Brazil: Development and Psychometric Evaluation of the GEM Scale. *Men and Masculinities*, *10*(3), 322–338. http://doi.org/10.1177/1097184X06298778

Reed, E., Raj, A., Miller, E., & Silverman, J. G. (2010). Losing the "gender" in gender-based violence: the missteps of research on dating and intimate partner violence. *Violence against Women*, *16*(3), 348–354. http://doi.org/10.1177/1077801209361127

Ridings, L. E., & Lutz-Zois, C. J. (2014). Emotional dysregulation and Borderline Personality Disorder: Explaining the link between secondary psychopathy and alexithymia. *Personality and Individual Differences*, *57*, 14–19. http://doi.org/10.1016/j.paid.2013.09.008

Robertson, K., & Murachver, T. (2007). It takes two to tangle: Gender symmetry in intimate partner violence. *Basic and Applied Social Psychology*, *29*(2), 109–118. http://doi.org/10.1080/01973530701331247

Rosenberg, M. (1965). *Rosenberg Self-esteem scale (1965)*. (Princeton University Press., Ed.). Princeton,.

Shorey, R. C., Brasfield, H., Febres, J., and Stuart, G. L. (2012). An examination of the association between difficulties with emotion regulation and dating violence perpetration. *J Aggress Maltreat Trauma*, *20*(8), 870–885. http://doi.org/10.1080/10926771.2011.629342.An

Shorey, R. C., Cornelius, T. L., & Bell, K. M. (2008). A critical review of theoretical frameworks for dating violence: Comparing the dating and marital fields. *Aggression and Violent Behavior*, *13*(3), 185–194. http://doi.org/10.1016/j.avb.2008.03.003

Speizer, I. S. (2011). Intimate partner violence attitudes and experience among women and men in Uganda. *Journal of Interpersonal Violence*, *25*(7), 1224–1241. http://doi.org/10.1177/0886260509340550.Intimate

Spitzer, R. L., Kroenke, K., Williams, J. B. W. (2000). Validation and utility of a self-report version of PRIME-MD the PHQ primary care study. *JAMA : The Journal of the American Medical Association*, *282*(18), 1737–1744. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.459.6032

Spriggs A. L. , Iannotti R. J. J. , Nansel T. R., & H. D. L. . (2007). Adolescent bullying involvement and perceived family, peer and school relations: Commonalities and differences across race/ ethnicity. *Journal of Adolescent Health*, *41*(3), 283–293. http://doi.org/10.1016/j.biotechadv.2011.08.021.Secreted

Stappenbeck, M.A., C. A., & Fromme, K. (2010). A longitudinal investigation of heavy drinking and physical dating violence in men and women. *Addictive Behaviors*, *35*(5), 479–485. http://doi.org/10.1016/j.addbeh.2009.12.027

Straus, M. A. (2008). Dominance and symmetry in partner violence by male and female university students in 32 nations. *Children and Youth Services Review*, *30*, 252–275. http://doi.org/10.1016/j.childyouth.2007.10.004

Straus, M. A., Hamby, S. L., Boney-McCoy, S. ., & Sugarman, D. B. (1996). The revised conflict tactics scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*. http://doi.org/10.1177/019251396017003001

Umana, J. E., Fawole, O. I., & Adeoye, I. A. (2014). Prevalence and correlates of intimate partner violence towards female students of the University of Ibadan , Nigeria. *BMC Women's Health*, 1–8. http://doi.org/10.1186/1472-6874-14-131

Undie, C., Maternowska, M. C., Mak, M., Birungi, H., Keesbury, J., & Askew, I. (2012). Routine screening for intimate partner violence in public health care settings in Kenya: An assessment of acceptability.

van der Kolk, (2005), Developmental trauma disorder. Journal of psychiatry annals.

Vagi, K. J., Latzman, N. E., Tharp, A. T., Hall, D. M. and Breiding, M. J. (2013). Beyond correlates: A review of risk and protective factors for adolescent dating violence perpetration. *Journal of Youth and Adolescence*, *42*(4), 633–649. http://doi.org/10.1016/j.biotechadv.2011.08.021.Secreted

Vial, W., & Heaven, Patrick C L and Ciarrochi, J. (2005). The relationship between self-esteem and academic achievement in high ability students: Evidence from the Wollongong Youth Study. *The Australian Journal of Gifted Education*, *14*(2), 39–45.

Whiteside, L. K., Walton, M. A., Bohnert, A. S. B., Blow, F. C., Bonar, E. E., Ehrlich, P., & Cunningham, R. M. (2013). Nonmedical prescription opioid and sedative use among adolescents in the emergency department. *Pediatrics*, *132*(5), 825–32. http://doi.org/10.1542/peds.2013-0721

World Health Organization. (2002). *World report violence on and health: summary* . Geneva.

World Health Organization. (2013). *Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*.

APPENDICES

Appendix I: Consent form-English Version

STUDY: EXPERIENCES OF INTER-PARENTAL VIOLENCE AND BEHAVIOR DEVELOPMENT AMONG 20-24-YEAR-OLD UNDERGRADUATES IN DAR ES SALAAM

STUDENT PARTICIPANT'S CONSENT FORM

Researcher: Elly Nollah Helela School: School of Medicine, Clinical Psychology

Investigator's /research assistant's statement

I,_____ am a research assistant working with Elly Nollah Helela, a clinical psychologist student at the University of Muhimbili, Department of Psychiatry and we wish to do a study entitled, experiences of Inter-parental violence and behavioural development among 20-24 years old undergraduate students in Dar es salaam.

This research study is part of the requirement for completion of a post graduate degree course under the supervision of Prof. S. Kaaya who is a professor at the University.

Background information

I am conducting a study that asks MUHAS undergraduates about violence in their relationships and life experiences. This information will help institutions, such as the Ministry of Health and the Government to develop early intervention services.

Purpose

This study will be exploring whether exposure to violence in childhood is a risk factor for inter-partner violence in adulthood.

This is a consent form, I will explain the content of the consent form to you which describes the procedures, risks, benefits and voluntary nature of your participation, If you agree to participate then I will ask you to sign the consent form showing that you have agreed to take part in the study.

Number of people who will take part in the study

The investigator will recruit a minimum of 404 MUHAS undergraduate.

Voluntarism

Participation in this study is voluntary, this means that you will not be victimized or coerced into taking part in the study if you do not want to; there will be no repercussions if you decide not to participate and you have the right to withdraw at any point during the study.

Procedures of the study and what will be expected of you

If you agree to participate in the study, you fill a self-report questionnaire with questions about yourself such as your age, and questions which will be used to assess for violence in your current relationship and in your family of origin. In this questionnaire, there is no right or wrong answer. Some of the sections may be difficult to answer but it may be useful to have the opportunity to think about such issues. If you should come across a question you feel very uncomfortable about it is OK to skip the question and go on to the next question. However, it is hopedthat you will attempt all questions since your views are important. The filled questionnaire will be picked by a research assistant after three days.

You may also be invited to participate in an in-depth interview about these issues. The questionnaire may take about 30 minutes to fill while the interview may take up to approximately 2 hours. The in-depth interview will be recorded using an audio recorder and the recordings will be kept in a safe place accessible only to the researcher and supervisors or research assistants who may be engaged to transcribe and who will have to sign a letter to retain confidentiality. The answered questionnaires and audio recording will be analysed and discarded. I will be available to answer any questions you might have after the in-depth interview.

Visits

The self-report questionnaire may be the only part of this study that many of you will participate in. A few will be selected for the follow up in-depth interview sessions. Follow up interview scheduling will be done at a time and place convenient for you. After the study report is completed, we will call you for a meeting during which you will be given appropriate feedback on what the study results showed.

Study Length

This study will take a total of 2 months to carry out, that is, from November to December 2015.

Risk, Stressor Discomfort

Given the sensitive nature of the study area, someof the questions may distress you, particularly if you have suffered from previous violence, as you may recall the events. In the event of high levels of distress after filling the questionnaire you can inform the RA collecting the questionnaire and he/she will assist in providing you the name and contact information of the student counsellor who will assist you.

Distress may also occur during the in-depth interviews. In the event I see any signs of your distress, I will stop the interview and ask you whether you would wish to rest before we continue; or if you would like to withdraw from the study. Either response will be accommodated as the voluntary nature of research allows you to withdraw with no consequences to yourself even after agreeing to participate. If needed, you will be provided the name and contact information of the student counsellor who will assist you.

Benefits

There will be no direct benefits from your participation in this study. However you would have participated in a process that will allow new insights about family related risk factors of dating violence and the information you provide will be an important contribution for preventive efforts.

Confidentiality:

For the questionnaire survey, no names will appear on the questionnaire. When we give you a questionnaire you will receive an envelope with you name on it and a number inside it. That number will be your unique ID. The envelope will be the only link between your name and your unique ID in this study. When you remain with the envelope and write the ID on the form, there will be no further study documents that link your ID to your name. An administrative tick against you name on a list will indicate you have received the questionnaire. No unique ID will appear in this list. In this way, the information you provide in the questionnaire will be anonymous.

A private location of your choice will be agreed for the in-depth interviews. Demographic information collected will be your age and sex only. A pseudo name of your choice will be used to refer to you during the interview. In order to capture the information you provide for use about your experiences a verbatim account will be enabled by an digital audio recorder. Once notes are transcribed to a computer, the recording will be erased. In this way the narrative data will also be anonymous that is unlinked to your identity.

All data will be stored on a pass word protected computer accessible to only the principal researcher and research assistants. All questionnaires that are filled will be kept in a locked cabinet in the office used by the principal researcher. Research assistants will be trained on basic research data collection procedures, research ethics and the importance of confidentiality of all responses given.

Contact information:

If you would like to get more information about this study please contact the main researcher: ELLY NOLLAH HELELA 0759519595 e-mail enhel.pugupoint@yahoo.com

If you have concerns about the infringements of your rights as a participant in this study, please contact: Prof. Said Aboud Tel: +255 22 2152489 the Chairperson of the Senate Research and Publications Committee, MUHAS.

STATEMENT OF CONSENT:

I _____ agree to: (please tick)

☐ Participate in the questionnaire survey

Signature: _____ Date: _____

Name and signature of RA: _____

Date signed: _____

Appendix II: Prevalence and determinants of IPV towards female/male students' questionnaire

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES

INSTRUCTIONS: PLEASE RESPOND TO ALL ITEMS ON THIS QUESTIONNAIRE TO THE BEST OF YOUR ABILITY. THERE ARE NO RIGHT OR WRONG ANSWERS AS EACH PERSPECTIVE YOU HAVE IS CONSIDERED CORRECT FOR YOU.

SOME QUESTIONS MAY BE SENSITIVE PLEASE TRY TO ANSWER THEM AS BEST AS YOU CAN. IF YOU FIND SOME TOO SENSITIVE IT IS OK TO SKIP THE QUESTION AND MOVE TO THE NEXT ONE.

THANK YOU IN ADVANCE FOR AGREEING TO PARTICIPATE IN THIS STUDY

ALL QUESTIONS AND RESPONSE OPTIONS ARE IN NORMAL TYPE. INSTRUCTIONS THAT PROVIDE GUIDANCE AS YOU RESPOND TO THIS QUESTIONNAIRE ARE IN BOLD TYPE.

UNIQUE ID:			

INITIALS OF RA:		

Date questionnaire received: ___ ____/ ____ ____/ ____ ____ ____ ___

Date Month Year

Date questionnaire collected: ___ ____/ ____ ____/ ____ ____ ____ ___

Date Month Yea

Section 1: Socio-Demographic Data and Screening Form

1. Your age in years (as at your last birthday).....
2. Marital status
    a. 1. [ ] Single, never married 2. [ ] Married 3[ ] Separated
    b. 4. [ ] Widowed 5. [ ] Divorced
3. What is your level of study in this university?
    1. [ ] Undergraduate (1st year) 2. [ ] Undergraduate (2nd year)
    a. 3. [ ] Undergraduate (3rd year) 4. [ ] Undergraduate (4thyear)
    b. 5. [ ] Undergraduate (5th year) 6.[ ] Others (specify).....
4. Who pays your school fees?
    1. [ ] Mother 2. [ ] Father 3.[ ] Husband/boyfriend 4.[ ]Relatives
    a. 5. [ ] Govt. /scholarship 6.[ ] Others (specify)
5. Ethnicity
    1. [ ] African 2. [ ] Arab 3.[ ] Indian 4. [ ] Caucasian
    a. 5. [ ] Others (specify)_____
6. Do you smoke cigarettes?
    a. 1. [ ] Yes 2.[ ] No

7. If yes to question No. 6 On the average how many sticks per day?

   If no, tick not applicable

   a. 1. [ ] 1-5 2.[ ] 6-10 3.[ ] 11-20 4.[ ] 20 and above 77. [ ] Not applicable]

   Do you take alcoholic drinks?

   b. 1. [ ] Yes 2.[ ] No

8. If yes to question No. 8 On the average what is your intake?

   If no, tick not applicable

   1.[ ] Everyday or nearly every day 2.[ ] Once or twice a week 3.[ ] 1-3 times a month

   4.[ ] Occasionally, less than once a month 5.[ ] Other (specify).....

   [ ] Not applicable]

9. Do you occasionally take drugs (e.g. marijuana, cocaine, heroin etc)

   1. [ ] Yes 2. [ ] No

10. What is your current marital status:

    1[ ] Married 2.[ ] Cohabiting 3. [ ] Separated

    4.[ ] Divorced ….5 [ ] Single, never married but have cohabited in the past

    6.[ ] Widow/widower … .7 [ ] Single, never married or cohabited

11. IF SINGLE ASK SCREENING QUESTION 12-13

12. Have you ever had a boyfriend/girlfriend [depending on your sex]

    a. 1. [ ] Yes 2.[ ] No

13. In the past 12 months have you had a boyfriend/girlfriend [depending on your sex]

    1. [ ] Yes 2.[ ] No

IF NOT SINGLE (QS 11 5, 6 OR 7 TICKED) AND DID NOT HAVE A BOY/GIRL FRIEND IN THE PAST 12 MONTHS – THE STUDY ENDS HERE THANK YOU FOR YOUR PARTICIPATION.

IF SINGLE PROCEED TO THE NEXT SECTION

Section 2: Current Relationship Status:

PREVALENCE AND DETERMINANTS OF IPV TOWARDS FEMALE/MALE STUDENTS AT MUHAS QUESTIONNAIRE

14. Please write in space provided your boyfriend/girlfriend's age in years (as at his last birthday).... AGE | | |

15. Does your boyfriend/girlfriend smoke cigarettes? PCIG | |

    1.[ ] Yes 2.[ ] No

16. If yes How many cigarettes per day does your boyfriend/girlfriend smoke | | |

    #CIG2

    1.[ ] 1-5 sticks of cigarette per day 2.[ ] 6-10 sticks of cigarette per day

    3.[ ] 11-20 sticks of cigarette per day 4.[ ] 20 and above sticks of cigarette per day…..5 [ ] I do not know

17. Does your boyfriend/girlfriend take drinks containing alcohol?

1.[ ] Never 2. [ ] Everyday or nearly every day 3.[ ] Once or twice a week

4.[ ] 1-3 times a month 5.[ ]Occasionally, less than once a month

6.[ ] Other (specify).....

RAPS4 measure for problem drinking

Q No	Item	YES	NO
18	During the last year have you had the feeling of guilt or remorse after drinking (remorse)	1	2
19	During the last year have a friend or a family ever told you about things you said or did while you were drinking that you could not remember (amnesia also called blackouts)	1	2
20	During the last year have you failed to do what you was normally expected from because of drinking? (Perform)	1	2
21	Do you sometimes take drinks in the morning when you first get up? (Starter, also called eye opener)	1	2

22. What is your boyfriend/girlfriend educational status?

1. [ ] None 2.[ ] primary education 3. [ ] Secondary education

4. [ ] Tertiary education

23. What is your boyfriend/girlfriend working status? .....

1.[ ] Self employed 2. [ ] Employed 3.[ ] Student

24. What is your boyfriend/girlfriend ethnic group?

1. [ ] African 2.[ ] Arab 3.[ ] Indian [ ] 4.Causician[ ] 5. Others specify [ ]

Section 3: History of Childhood Abuse

Please you are required to answer yes or no to question 15, and if yes also indicate the number of times it occurred.

Before the age of 15 years, did you experience any of the following?				If yes, how many times did it occur before your 15th birthday?			
		1	2		1	2	3
		YES	NO		Once or twice	A few(3-5) Times	Many (more than 5)times
25	Were you severely beaten by your parents or guardian			25a			
26	Did any man/woman naked himself or masturbate before you?			26a			
27	Did anyone fondle you or have sexual penetration with you?			27a			
28	Did anyone force you to have sex or to perform a sexual act when you did not want to?			28a			

Section 4: Inter-Parental Violence

				If yes, how many times did it occur before your 15th birthday?			
		1	2		1	2	3
		YES	NO		Once or twice	A few(3-5) Times	Many (more than 5)times
29	When you were a child, before you were 18 years old, did you see or hear your mother/guardian being threatened with violence, threatened with destruction of her property or harm to her children by your father (or her husband or boyfriend)?			29a			
30	When you were a child before 18 years old, did you see or hear your mother/guardian being pushed, being Strangled or beaten by your father (or her husband or boyfriend)?			30a			
31	When you were a child, before you were 18 years old, did you see or hear your father/guardian being threatened with violence, threatened with destruction of her property or harm to her children by your Mother (or his wife or girlfriend)?			31a			
32	When you were a child before 18 years old, did you see or hear your father/guardian being pushed, being strangled or beaten by your Mother (or his wife or girlfriend)			32a			

Section 5: Rosenberg's Self-Esteem Scale

Now here are some other opinion statements about what you think about yourself, please think first if you agree or disagree with the statement; then make a decision on the extent to which you agree or disagree with the statement and then respond.

No	Opinion statements	Strongly Disagree	Disagree	Agree	Strongly Agree
33.	I feel that I am a person of worth, at least on an equal basis with others	0	1	2	3
34.	I feel that I have a number of good qualities	0	1	2	3
35.	All in all, I have disappointed others and myself (I feel like a failure)	3	2	1	0
36.	I am able to do things as well as most people	0	1	2	3
37.	I feel I do not have much to be proud of	3	2	1	0
38.	I take a positive attitude toward myself	0	1	2	3
39.	On the whole, I am satisfied with myself	0	1	2	3
40.	I wish I could have more respect for myself	3	2	1	0
41.	I certainly feel useless at times	3	2	1	0
42.	At times, I think I am no good at all	3	2	1	0

Do not fill the box below

RSE’s TOTAL

Section 6: Assessment of Depression

Now I would like to ask you questions regarding symptoms of depression. Please tell me, if these symptoms have occurred in the past two weeks.

Please tick the response number that correctly reflects your experiences in the past two weeks using the following options: 0=Not at all 1= several days but less than half the days 2= More than half the days 3= nearly every day.

PATIENT HEALTH QUESTIONNAIRE-9				
Over the last two weeks, how often have you been bothered by any of the following symptoms?	Not at all	Several days	More than half the days	Nearly Everyday
43.Little interest or pleasure in doing things	0	1	2	3
44.Feeling down, depressed or hopeless	0	1	2	3
45.Trouble falling, staying asleep or sleeping too much	0	1	2	3
46.Feeling tired or having little energy	0	1	2	3
47.Poor appetite or over eating	0	1	2	3
48.Feeling bad about yourself or that you are a failure or have let yourself or family down	0	1	2	3
49.Trouble concentrating on things such as reading the newspaper or watching television	0	1	2	3
50.Moving or speaking so slowly that other people could have noticed or the opposite- being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
51.Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3

52. If you checked off any problems, how difficult have these problems made it for you to do your work/assignements, take care of things at home, or get along with other people?

1. ( ) Not difficult at all 2.( ) Somewhat difficult 3.( ) Very difficult 4.( )Extremely difficult

Section 7: Assessment of Dating Violence

CONFLICT TACTIC SCALE (CTS2): In this section I would like to ask about the history of violence in your life**as** an adolescent and current (past 12 months).

We all know, no matter how well people get along, there are times when they disagree or get annoyed with the other person, want different things from each other or just have fights or arguments because they are in a bad mood, tired or for some other reason. People also have many different ways of trying to settle their differences. In the matrix below some of the ways are mentioned. Please report using the following codes, for it this has ever happened since you were aged 15 years and above and in the past year. Codes:

0 = No, this never happened in my life time or in the past 12 months

1 = Happened at least once in my life time

2 = 1-2 times in the past 12 months

3= 3-5 times in the past in the past 12 months

4= More than 5 times in the past 12 months

Var. Name		0	1		0	1	2	3	4
		NO	YES	Var. Name	NO	Once	1-2 times	3-5 times	(More than 5 times)
53aDV	My boyfriend or girlfriend showed care for me even though we disagreed	1	2	53bDVR	0	1	2	3	4
54aDV	My boyfriend or girlfriend explained his side of disagreement to me	1	2	54bDVR	0	1	2	3	4
55aDV	My boyfriend or girlfriend swore or insulted me	1	2	55bDVR	0	1	2	3	4
56aDV	My boyfriend or girlfriend yelled or shouted at me	1	2	56bDVR	0	1	2	3	4
57aDV	My boyfriend or girlfriend stomped out of the house during a disagreement	0	1	57bDVR	0	1	2	3	4
58aDV	My boyfriend or girlfriend did something to spite me	0	1	58bDVR	0	1	2	3	4
59aDV	My boyfriend or girlfriend showed	0	1	59bDVR	0	1	2	3	4

Var. Name		0	1		0	1	2	3	4
		NO	YES	Var. Name	NO	Once	1-2 times	3-5 times	(More than 5 times)
	respect for my feelings about an issue								
60aDV	My boyfriend or girlfriend destroyed something that belonged to me	0	1	60bDVR	0	1	2	3	4
61aDV	My boyfriend or girlfriend threatened to hit or throw something at me	0	1	61bDVR	0	1	2	3	4
62aDV	My boyfriend or girlfriend threw something at me that could hurt	0	1	62bDVR	0	1	2	3	4
63aDV	My boyfriend or girlfriend twisted my arm or my hair	0	1	63bDVR	0	1	2	3	4
64aDV	My boyfriend or girlfriend shoved or pushed me	0	1	64bDVR	0	1	2	3	4
65aDV	My boyfriend or girlfriend beat me up	0	1	65bDVR	0	1	2	3	4
66aDV	My boyfriend or girlfriend grabbed	0	1	66bDVR	0	1	2	3	4

Var. Name		0 NO	1 YES	Var. Name	0 NO	1 Once	2 1-2 times	3 3-5 times	4 (More than 5 times)
	me								
67aDV	My boyfriend or girlfriend threatened me with a knife or a gun	0	1	67bDVR	0	1	2	3	4
68aDV	My boyfriend or girlfriend used a knife or a gun on me	0	1	68bDVR	0	1	2	3	4
69aDV	My boyfriend or girlfriend punched me or hit me with something that could hurt	0	1	69bDVR	0	1	2	3	4
70aDV	My boyfriend or girlfriend choked me	0	1	70bDVR	0	1	2	3	4
71aDV	My boyfriend or girlfriend burned or scalded me on purpose	0	1	71bDVR	0	1	2	3	4
72aDV	My boyfriend or girlfriend suggested a compromise to a disagreement	0	1	72bDVR	0	1	2	3	4
73aDV	My boyfriend or girlfriend kicked me	0	1	73bDVR	0	1	2	3	4

Var. Name		0	1		0	1	2	3	4
		NO	YES	Var. Name	NO	Once	1-2 times	3-5 times	(More than 5 times)
74aDV	My boyfriend or girlfriend made me have sex without a condom	0	1	74bDVR	0	1	2	3	4
75aDV	My boyfriend or girlfriend used force to make me have sex	0	1	75bDVR	0	1	2	3	4
76aDV	My boyfriend or girlfriend used force to make me have oral sex	0	1	76bDVR	0	1	2	3	4
77aDV	My boyfriend or girlfriend insisted on sex when I did not want to(but did not use physical force)	0	1	77bDVR	0	1	2	3	4
78aDV	My boyfriend or girlfriend used threats to make me have oral sex	0	1	78bDVR	0	1	2	3	4
79aDV	My boyfriend or girlfriend used threats to make me have sex	0	1	79bDVR	0	1	2	3	4

80. Among the following, who perpetrated the acts that you have just mentioned? Write 1 for Yes and 2 for No

	Yes	No
80a. Partner	[ ]	[ ]
80b. Relative	[ ]	[ ]
80c. Friend	[ ]	[ ]
80d. Neighbours	[ ]	[ ]
80e. Police	[ ]	[ ]
80f. Community member	[ ]	[ ]

Section 8: Impact and Coping with Intimate Partner Violence

81. In what way if any has your girlfriend/boyfriend violent behaviour affected your studies?

1. [ ] Studies not affected 2.[ ] Partner interrupted my studies 3.[ ] Unable to concentrate

4.[ ] Unable to study/ sick leave 5.[ ] Lost self confidence

6.[ ] Affected physical and mental health. 7.[ ] Others (specify) ……...

82. Did you ever go to any of the following for help? Write 1 for Yes and 2 for No

	Yes	No
82a. Police	[ ]	[ ]
82b. Hospital or health centre	[ ]	[ ]
82c. Social service/ shelter	[ ]	[ ]
82d. Legal advice centre/ court	[ ]	[ ]
82e. Traditional/ local leader	[ ]	[ ]

82f. Women's organization	[ ]	[ ]
82g. Priest/ religious leader	[ ]	[ ]
82h. Others (specify)	[ ]	[ ]
82i. Did not go for help	[ ]	[ ]

83. If you went for help, what was the reason that made you to go for help?

1.[ ] Encouraged by friends/ family 2.[ ] Could not endure anymore 3.[ ] Badly injured

4.[ ] He/she threatened/tried to kill me 5.[ ] Thrown out of the home

6.[ ] Other (specify).....

84. In What ways did seeking help influence your relationship with your boyfriend/girlfriend?

1. [ ] Discussed the violence and improved relationship

2. [ ] Continued the relationship with no discussion of the violence

3. [ ] Discussed the violence and ended the relationship

4. [ ] Ended the relationship with no discussion of the violence

Section 9: The Gender-Equitable Men Scale (GEM Scale)

Here are some opinion statements about what we think about men and women in our communities. Please indicate the extent to who you agree or not to the statements by using the provided response options

No	Opinion statements	Response Options		
		(1) Agree	(2) Partially agree	(3) Do not agree
85.	It is the man who decides what type of sex to have.	1	2	3
86.	A woman's most important role is to take care of her home and cook for her family.	1	2	3
87.	Men need sex more than women do.	1	2	3
88.	You don't talk about sex, you just do it.	1	2	3
89.	Women who carry condoms on them are "easy".	1	2	3
90.	Changing diapers, giving the kids a bath, and feeding the kids are the mother's responsibility.	1	2	3
91.	It is a woman's responsibility to avoid getting pregnant.	1	2	3
92.	A man should have the final word about decisions in his home.	1	2	3
93.	Men are always ready to have sex.	1	2	3
94.	There are times when a woman deserves to be beaten.	1	2	3
95.	A man needs other women, even if things with his wife are fine.	1	2	3
96.	If someone insults me, I will defend my reputation, with force if I have to.	1	2	3
97.	A woman should tolerate violence in order to keep her	1	2	3

No	Opinion statements	Response Options		
		(1) Agree	(2) Partially agree	(3) Do not agree
	family together.			
98.	I would be outraged if my wife asked me to use a condom.	1	2	3
99.	It is okay for a man to hit his wife if she won't have sex with him.	1	2	3
100.	I would never have a gay friend.	1	2	3
101.	It disgusts me when I see a man acting like a woman.	1	2	3
102.	A couple should decide together if they want to have children.	1	2	3
103.	In my opinion, a woman can suggest using condoms just like a man can.	1	2	3
104.	If a guy gets a woman pregnant, the child is the responsibility of both	1	2	3
105.	A man should know what his partner likes during sex.	1	2	3
106.	It is important that a father is present in the lives of his children, even if he is no longer with the mother.	1	2	3
107.	A man and a woman should decide together what type of contraceptive to use.	1	2	3
108.	It is important to for a guy to have a male friend that he can talk about his problems with.	1	2	3

Appendix III: Ridhaa ya Kushiriki

CHUO KIKUU – MUHIMBILI

KITENGO CHA MAGONJWA YA AKILI

DHIHIRISHO LA VURUGU/UKATILI HATARISHI MIONGONI MWA WAZAZI NA KUJENGEKA KWA TABIA KWA WANACHUO WA SHAHADA YA KWANZA WENYE UMRI KATI YA MIAKA 20-24, DAR-ES-SALAAM

HATI YA RIDHAA YA KUSHIRIKI KWA WANAFUNZI

MTAFITI: Elly Nollah Helela School: School of Medicine, Clinical Psychology

Kauli ya Mtafiti/Mtafiti msaidizi

Mimi, …….. mtafiti msaidizi nikifanya utafiti pamoja na Elly Nollah Helela, ambaye ni mwanafunzi wa saikolojia ya kimatibabu katika Chuo Kikuu cha Muhimbili, Kitengo cha Magonjwa ya Akili anapenda kufanya utafiti wenye topiki Dhihirisho la vurugu/ukatili hatarishi baina ya wazazi na kujengeka kwa tabia kwa wanafunzi wa shahada ya kwanza (undergraduates) wenye umri kati ya miaka 20-24, Dar-Es-Salaam. Utafiti huu ni sehemu ya ya hitaji ili nimalize masomo yangu. Wasimamizi wa utafiti huu ni Professor S. Kaaya na Dr. Elia John Mmbaga ambao ni waalimu katika Chuo Kikuu Muhimbili.

Mambo Kuhusu Utafiti

Nitafanya utafiti unao dodosa wanafunzi wa shahada ya kwanza wa MUHAS kuhusiana na dhihirisho la vurugu/ukatili hatarishi miongoni mwa wazazi. Matokeo ya utafiti huu yatasaidia taasisi kama vile Wizara ya Afya, na Serikali kuandaa mipango ya mapema ya kuzuiavurugu/ukatili hatarishi.

Madhumuni ya UtafitiUtafiti huu utachunguza iwaapo kuhusishwa na vurugu/ukatili baina ya wazazi ni kichocheo cha ukatili katka mahusiano ya wapendanao katika maisha yao ya baadae/utu uzima.

Idadi ya watakaoshiriki utafiti huu

Mtafiti atahusisha wanafunzi wa shahada ya kwanza (undergraduates) 404 wa MUHAS.

Utaratibu wa Utafiti

Iwapo utakubali kushiriki katika uchunguzi, utajaza dodoso ukijieleza wewe binafsi kuhusiana na umri, pia yapo maswali yatakayotumika kupata taarifakuhusu ukatili kwa wakati wa sasa na maswali ya jamii yako wakati wa utotoni. Katika dodoso hakuna jibu sahihi na jibu lisilokuwa sahihi. Baadhi ya vipengele hivyo vyaweza kuwa vigumu kujibu, ila vipengele hivyo vyaweza kuwa fursa nzuri kuvitafakari. Iwapo litatokezea swali/maswali yasiokupendezesha ni busara kama utayaruka na kuendelea na maswali yanayofuata. Japo ni matumaini kwmba utafanya kila juhudi kuyajibu yote kwa kuwa mchango wako ni muhimu sana. Dodoso zilizojazwa zitakusanywa na watafiti wasidizi ndani ya muda wa siku tatu. Pia unaweza kuombwa kushiriki katika mahojiano ya kina kuhusiana na jambo hili. Dodoso linaweza kuchukua muda wa dakika 30 au zaidi, wakati ambapo mahojiano ya kina yanaweza kuchukua hadi masaa 2. Mahojiano ya kina yatarekodiwa na kutunzwa katika sehemu salama ambayo yataweza yataweza kufikiwa tu na watafiti wasaidiz na mtafiti mkuu, wasimamizi wa uchunguzi/utafiti na watafiti wasaidizi ambao watahusishwa na kukubaliana kwa maandishi kutunza siri. Dodosona mahojiano ya kina yaliyorekodiwa yatakapokuwayamechanganuliwa yataharibiwa. Nikiwa mtafiti nitahusika nitahusika kujibu maswaliyatakayojitokeza miongoni mwa watakahojiwa kwa kina.

Ziara

Ziara pekee utakayohitajika kushiriki ni wakati wa utafiti unapofanyika. Baadhi yenu mtachaguliwa kushiriki katika ufuatiliajiwa mahojiaano ya kina pale itakapobidi. Ufuatiliaji utafanywa kwa makubaliano ya sehemu na wakati mwafaka kwenu. Baada ya utafiti kukamilika, utaitishwa mkutano kutoa mrejesho wa matokeo ya utafiti.

Urefu wa Muda wa Utafiti

Kufanya na kumaliza utafiti huu kutachukua miezi miwili, toka Novemba hadi Desemba 2015.

Hali ya kufadhaishwa roho

Kulingana na unyeti wa utafiti huu, iwapo itatokezea kwamba ukajisikia kufadhaishwa na mambo utakayoyaona katika dodoso au tutakayoongea katika mahojiano ya kina na iwapo uliwahi uliwahi athirika na ukattili hatarishi baina ya wazazi. Nitakuwa tayari kukuunganisha na mtandao wa huduma za afya kulingana na mahitaji yako. Kufadhaishwa kunaweza kutokea wakati wa mahojiano ya kina. Pindi ikitokea hali hiyo nitasimama mahojiano na kukutaka kufahamu kama utahitaji mapumuziko kabla ya kuendelea, au kama utahitaji kuacha kabisa kushiriki fursa ya kutoendelea kushiriki ipo wazi bila ya madhara ye yote japo ulishakubali kushiriki. Itakapobidi utapewa jina na maelezo ya mshauri nasaha atakayetoa msaada kwako, na pia kama italazimika mshauri nasaha anaeweza kukupa rufaa kwa mwanasaikolojia kufuata taratibu za sehemu husika.

Manufaa

Hakuna manufaa ya moja kwa moja katika utafiti huu. Japo kuwa utakuwa umeshiriki kutoa mchango muhimu sana katika mchakato wa kuleta uelewa mpya katika mambo yanayochangia kuleta ukatili katika mahusiano, na taarifa zako ni mchango muhimu sana katika kuzuia kutokea kwa ukatili huo.

Usiri katika utafiti

Katika dodoso, hakuna majina yatakayojitokeza. Utapewa dodoso katika bahasha iliyoandikwa jina lako na namba ndani ya bahasha. Hiyo namaba ndiyo utambulisho wako. Bahasha ni kiunganishi kati ya jina lako na utambulisho. Hakutakuwapo tena kitu chochote katika dodoso kitakachounganisha kati ya utambulisho na jina lako. Uongozi utaweka alama kuonyesha umeshapokea dodoso.Hakuna nambaya utambulisho itakayonekana kwenye orodha ya majina. Kwa njia hii taarifa kwenye dodoso hazitamtambulisha mshiriki kwa jina.

Sehemu mwafaka utakayoipendelea itatumika kwa mahojiano ya kina. Taarifa zinazokuhusu ni za umri na jinsia. Jina bandia litatumika kwa mahojiano ya kina. Ili kupata taarifa tutakazoongea zitachukuliwa kwa rekoda ya kidijitali, ambapo hizo taarifa

zitahamishiwa kwenye komputa, na taarifa zilizorekodiwa kufutwa. Kwa utaratibu huu pia taarifa za mazungumzo ya ina zitakuwa hazimtambulishi mshiriki ye yote kwa jina.

Taarifa zote zitahifadhiwa kwa kutumia nenosiri (password) katika komputa ambayo itajulikana kwa mtafiti mkuu na watafiti wasaidizi. Madodoso yaliyokwisha jazwa yatatunzwa na kufungiwa katika eneo la mtafiti mkuu. Watafiti wasaidizi watafundishwa katika mambo ya msingi ya kukusanya taarifa, kutunza taarifa, miiko ya utafiti, pamoja na usiri kwa matukio yote yatakayojitokeza kwenye utafiti.

Sehemu ya kupata taarifa

Ukitaka kupata maelezo zaidi kuhusiana na utafiti huu, wasiliana na mtafiti mkuu. Elly Nollah Helela 0759 519595 e-mail enhel.pugupoint@yahoo.com

Ukiwa na jambo linalohusisha kutotendewa haki katika ukiwa mshiriki katikautafiti huu, tafadhali wasiliana na, Said Abaid, tel. +255222152489 amabaye ni mwenyekiti wa seneti ya utafiti na kamati ya uchapishaji wa taftishi za MUHAS.

TAARIFA YA KUKUBALI USHIRIKI

Mimi…….. (tiki) ☐ Kushiriki katika dodoso

Kushiriki katika mahojiano ya kina ☐

Sahihi ……. Tarehe ……

Jina na sahihi ya mtafiti msaidizi……...…… Tarehe……

Appendix IV: Prevalence and determinants of IPV questionnaire- Swahili version

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES

MAELEKEZO: Tafadhali jibu maswali yote katika dodoso kwa uwezo wako wote. hakuna jibu sahihi na hakuna jibu lisilo sahihi kwa vile kila jibu ni sahihkwa mtazamo wako. maswali mengine yaweza kuwa nyeti, tafadhali yajibu kwa ubora kadiri uwezao. Ukiona mengine ni nyeti mno ni ruksa kuyaacha na ukaendelea kujibu yanayofuatia.

Natanguliza shukrani kwa kukubali kushiriki katika utafiti huu.

Maswali yote na majibu elekezi yapo katika mchapo wa kawaida. Maelezo yatoayo mwongozo wa kujibu dodoso yamekolezwa wino.

NAMBA YAUTAMBULISO:			

VIFUPISHO VYA MTAFITI:		

Tarehe ya kupokea dodoso: ___ ____/ ____ ____/ ____ ____ ____ ___

Tarehe Mwezi Mwaka

Tarehe ya kuchukua dodoso: ___ ____/ ____ ____/ ____ ____ ____ ___

Tarehe Mwezi Mwaka

Sehemu ya 1: Taarifa za Kijamii na fomu za Uchunguzi

1. Umri wako katika miaka (kadiri ya siku yako ya mwisho ya sherehe ya kuzaliwa).....
2. Hali yako ya ndoa

   1. [ ] Nipo peke yangu, sijawahi oa/olewa 2. [ ] Nipo kweye ndoa 3[ ] Tumeachana

   4. [ ] Nimefiwa na mwenza 5. [ ] Tumetalikiana
3. Upo kiwango gani cha elimu katika Chuo Kikuu?

   1. [ ] Shahada ya kwanza (Mwaka wa 1) 2. [ ] Shahada ya kwanza (Mwaka wa 2) 3. [ ]Shahada ya kwanza (Mwaka wa3) 4. [ ] Shahada ya kwanza (Mwaka wa 4)

   5. [ ] Shahada ya kwanza (Mwaka wa 5) 6. [ ] Nyingine (taja).....
4. Nani hukulipia ada?

   1. [ ] Mama 2. [ ] Baba 3.[ ] Mume wangu/Mpenzi wangu 4.[ ] Ndugu yangu

   5. [ ] Serikali /Udhamini 6.[ ] Vyanzo vingine (taja)
5. Utaifa

   1. [ ] Mwaafrika 2. [ ] Mwaarabu 3.[ ] Muhindi 4. [ ] Mweupe

   5. [ ] Mwingine(taja)_____
6. Je! Huvuta sigara?

   1. [ ] Ndio 2.[ ] Hapana
7. Kama ndio kwa swali namba 6, kwa wastani sigara ngapi kwa sikiu?
8. Kama hapana tiki Si husika

   1. [ ] 1-5 2.[ ] 6-10 3.[ ] 11-20 4.[ ] 20 na kuzidi 77. [ ] Si husika]

9. Unakunywa pombe?

   1. [ ] Ndio 2.[ ] Hapana

10. Kama ndio kwa swali namba 8, wastani ni kiasi gani unakunywa?

    Kama hapana tiki Si husika

    [ ] Kila siku, karibu kila siku 2. [ ] Mara moja au mara mbili kwa wiki

    [ ] 1-3 kwa mwezi 4. [ ] Mara chache, chini ya mara moja kwa mwezi

    5. [ ] Vinginevyo (taja).....

    [ ] Si husika]

11. Hutokea wakati ukatumia madawa yakulevya (e.g. marijuana, cocaine, heroin n.k.)

    1. [ ] Ndio 2. [ ] Hapana

    Hali ya ndoa kwa wakati uliopo:

    1.[ ] Nimeoa/Nimeolewa 2.[ ] Kinyumba 3. [ ] Tumetengana

    4.[ ] Tumeachana 5 [ ] Kapera, sijawahi oa/olewa bali unyumba nyakati zilizopita

    6.[ ] Kapera, nimefiwa na mwenza.7. [ ] Kapera, sijawahi oa/olewa au ishi unyumba

KAMA KAPERA ULIZA MASWALI YA KIUCHUGUZI (SCREENING) 12-13

12. Umewahi kuwa na mpenzi wako wa kiume/kike [kutegemea na jinsia ya atoaye maelezo]

    1. [ ] Ndio 2.[ ] Hapana

13. Katika miezi 12 iliyopita umekuwa na mpenzi wa kiume/kike [kutegemea na jinsia ya atoaye maelezo]

    1. [ ] Ndio 2.[ ] Hapana

KAMA SIO KAPERA (SWALI NAMBARI 11 KIPENGELE 5, 6 AU 7 YAKIWA NA ALAMA YA TIKI) NA HAKUWA NA MPENZI KATIKA MIEZI 12 ILIYOPITA-UCHUNGUZI UNAISHIA HAPA NA UNAMSHUKURU MSHIRIKI KWA USHIRIKI. KAMA NI KAPERA ENDELEA NAYE KATIKA SEHEMU INAYOFUATA

Sehemu ya 2: Uhusiano kwa Wakati Uliopo

DODOSO LA KIWANGO NA VIGEZO VYA VURUGU ZA WAPENZI MIONGONI MWA WANAFUNZI WANAWAKE /WANAUME – MUHAS

14. Tafadhali andika katika nafasi uliyopo umri wa mpenzi wako katika miaka (kadiri ya siku yako ya mwisho ya kuzaliwa).... AGE | | |

15. Je! Mpenzi wako huvuta sigara? PCIG |

1.[ ] Ndio 2.[ ] Hapana

16. Kama ndio ni sigara ngapi mpenzi wako anavuta kwa siku moja #CIG2 | |

1. [ ] 1-5 stiki za sigara kwa siku moja 2. [ ] 6-10 stiki za sigara kwa siku moja

3. [ ] 11-20 stiki za sigara kwa siku moja 4. [ ] 20 na hata zaidi stiki za sigara kwa siku 5. [ ] Sifahamu idadi

17. Je! Mpenzi wako anakunywa vinywaji vyenye pombe?

1. [ ] Hapana 2. [ ] Kila siku au karibia kila siku 3. [ ] Mara moja au mara mbili |

4. [ ] 1-3 kwa mwezi 5.[ ] Mara chache, chini ya mara moja kwa mwezi

6. [ ] Nyinginer (taja).....

RAPS4 measure for problem drinking-Swahili version

	NDIO	HAPANA
18. Katika muda wa mwaka moja uliopita, umepoteza rafiki au mpenzi kwa sababu ya unywaji pombe (matokeo ya kijamii)	1	2
19. Katika muda wa mwaka moja uliopita, umeshindwa kufanya yale uliyotarajiwa kufanya kwa sababu ya unywaji wa pombe (perform)	1	2
20. Katika muda wa mwaka moja uliopita, umejihisi kujilaumu baada ya kunywa pombe (majuto)	1	2
21. Baadhi ya nyakati huwa unakunywa pombe asubuhi baada tu ya kuamka (starter au eye opener)	1	2

22. Je! Elimu ya mpenzi wako ni ya kiwango gani?

1. [ ] Hana 2. [ ] Elimu ya msingi 3. [ ] Elimu ya sekondari

4. [ ] Elimu ya juu.

23. Mpenzi wako anaajira ya namna gani? .....

1.[ ] Kujiajiri 2. [ ] Kuajiriwa 3.[ ] Mwanafunzi

24. Mpenzi wako ni wa Utaifa gani?

1. [ ] Mwaafrika 2. [ ] Mwaarabu 3. [ ] Kihindi [ ] 4. Mweupe [ ]5. Mwingine [taja]

Sehemu ya 3: Historia ya Unyanyasaji Utotoni

Tafadhali unapaswa kujibu ndio au hapana kwa swali la 9, na kama ndio onyesha ni mara ngapi imetokea

	Kabla ya hujatimiza miaka 15, uliwahi kushuhudia matukio yafuatayo?			Iwapo ndio ni mara ngapi ilitokea kabla ya mwaka wako 15 baada ya kuzaliwa (15th birthday)?			
		1	2		1	2	3
		NDIO	HAPANA		Moja au mbili	Chache (mara3-5)	Nyingi (zaidi ya mara 5)
25.	Je! uliwahi pigwa sana na wazazi wako au mlezi wako?			25a			
26.	Je! aliwahi tokezea mwanaume/mwnamke akavua mbele yako au akafanya punyeto ukimshuhudia?			26a			
27.	Je! yupo aliyekuchezea kimapenzi au kukuingilia kimwili na kufanyanawe tendo la ndoa?			27a			
28.	Je! yupo aliyewahi kukulazimisha kufanya naye ngono au kufanya nawe tendo la ndoa bila wewe kupenda?			28a			

Sehemu ya 4: Vurugu Baina ya Wazazi

				Iwapo ndio ni mara ngapi ilitokea kabla ya mwaka wako 15 baada ya kuzaliwa (15th birthday)?			
		1	2		1	2	3
		NDIO	HAPANA		Moja au mbili	Chache (mara3-5)	Nyingi (zaidi ya mara 5)
29.	Ukiwa mtoto, kabla yakufikisha miaka 18, je! uliwahi kuona au kusikia mama yako mzazi akitishiwa na baba yako mzazi au mume wake au mpenzi wake, kwa vurugu hatarishi, akitishiwa na uharibifu wa mali zake au kuwadhuru watoto wake?			29a			
30	Ukiwa mtoto chini ya miaka 18, je! uliwahi kuona au kusikia mama yako mzazi akisukumwa, akikabwa au akipigwa na baba yako mzazi, mumewe, au mpenzi wake?			30a			
31.	Ukiwa mtoto, kabla yakufikisha miaka 18, je! uliwahi kuona au kusikia baba			31a			

	yako mzazi akitishiwa na mama yako mzazi au mke wake au mpenzi wake, kwa vurugu hatarishi, akitishiwa na uharibifu wa mali zake au kuwadhuru watoto wake?						
32.	Ukiwa mtoto chini ya miaka 18, je! uliwahi kuona au kusikia baba yako mzazi akisukumwa, akikabwa au akipigwa na mama yako mzazi, mkewe, au mpenzi wake?			32a			

Sehemu ya 5: Rosenberg's Self-Esteem Scale – Swahili version

DODOSO LA KUJIPIMA KIWANGO CHA STASHI-BINAFSI (SELF-ESTEEM)

Maelezo

Hapo chini zinafuata kauli nyingine zenye changamoto kuhusiana na unachokiwaza, tafadhali tafakari, fikiri kwanza kuelewa kuwa unakubaliana au hukubaliani na kauli kabla ya kujibu, na kisha weka bayana ni kwa kiwango gani unakubaliana au hukubaliani.

		Sikubaliani kabisa	Sikubaliani	Nakubaliana	Nakubaliana kabisa
33.	Najihisi ninathamani kimsingi sawa na watu wengine	0	1	2	3
34.	Ninajihisi ni mtu mwenye viwango vizuri	0	1	2	3

35.	Pamoja na hayo yote, nimekatisha tamaa watu wengine pamoja na mimi mweyewe	3	2	1	0
36.	Nina uwezo wa kufanya vizuri kama wafanyavyo wengine	0	1	2	3
37.	Nahisi sina mengi ya kujivunia.	3	2	1	0
38.	Ninajipa mtazamo chanya kuhusu mimi mwenyewe.	0	1	2	3
39.	Kwa ujumla naridhika na jinsi niliyo.	0	1	2	3
40.	Natamani ningeweza kujiheshimu zaidi.	3	2	1	0
41.	Kiuhakika wakati mwinigine nahisi sina faida.	3	2	1	0
42.	Wakati mwingine najiona sina uwezo.	3	2	1	0

Majumuisho ya RSE

Vipengele namba 2, 5, 6, 8, 9 vinajumlishwa kinyume. “Sikubaliani kabisa” ina alama 1, “Sikubaliani” alama 2, “Nakubaliana”alama 3, na “Nakubaliana kabisa” alama 4.Jumlisha alama za vipengele vyote. Kuongezeka kwa alama za ujumlishaji kunaashiria kuongezeka kwa kiwango cha kujithamini.

Sehemu ya 6: Upimaji wa Sonona

Sasa ningependa kukuuliza maswali kuhusiana na dalili za ugonjwa wa sonona. Tafadhali niambie kama dalili hizi zimewahi kutokea ndani ya wiki mbili zilizopita.

Katika kipindi cha wiki mbili zilizopita, ni mara ngapi umekuwa ukisumbuliwa na dalili zifuatazo?

0= Hapana kabisa, 1=Siku kadhaa, 2=Zaidi ya nusu siku hizo, 3= Takriban kila siku

Tafadhali tiki jibu sahihi

DODOSO JUU YA AFYA YA MGONJWA -9 (PHQ-9)				
	Hapana kabisa	Siku kadhaa	Zaidi ya nusu siku hizo	Takriban kila siku
43. Kutokuwa na hamu ya kufanya kitu	0	1	2	3
44. Kujisikia tabu sana au kukata tamaa	0	1	2	3
45. Matatizo ya kupata usingizi au kuweza kulala au kulala sana	0	1	2	3
46. Kujisikia kuchoka au kutokuwa na nguvu	0	1	2	3
47. Kutokuwa na hamu ya kula au kula sana	0	1	2	3
48. Kujisikia vibaya au kujiona kuwa umeshindwa kabisa au umejiangusha au kuikatisha tamaa familia yako	0	1	2	3
49. Matatizo ya kuwa makini kwa mfano unaposoma gazeti au kuangalia television	0	1	2	3
50. Kutembea au kuongea taratibu sana mpaka watu wakawa wameona tofauti?Au kinyume chake kwamba hutulizani na unahangaika sana kuliko ilivyo kawaida	0	1	2	3

DODOSO JUU YA AFYA YA MGONJWA -9 (PHQ-9)				
	Hapana kabisa	Siku kadhaa	Zaidi ya nusu siku hizo	Takriban kila siku
51. Mawazo kuwa ni afadhali zaidi ufe au ujidhuru kwa namna Fulani	0	1	2	3

52. Kama ulitiki alama kwenye matatizo, matatizo hayo yamefanya iwe vigumu kiwango gani kwako katika kufanya kazi yako, kushughulikia vitu nyumbani au kutangamana na watu wengine?

1. Sio ngumu hata kidogo ( ) 2. Ngumu kiasi ( ) 3. Ngumu sana ( ) 4. Ngumu zaidi ( )

Sehemu ya 7: Assessment of Dating Violence- Conflict Tactic Scale – Swahili Version

UPIMAJI WA KIWANGO CHA UNYANYASAJI

Katika kipengele kifuatacho, ningependa kuuliza kuhusu historia ya unyanyasaji katika maisha yako katika kipindi cha miezi 12 iliyopita.

Tunafahamu kuwa japokuwa watu huwa na maelewano mara nyingi, inatokea kipindi wanafarakana au kutoelewana, kuwa na matamanio tofauti au kulumbana na kupigana kwa sababu ya kutokuwa na furaha na wenzi wao. Vilevile watu wana njia nyingi za kutatua matatizo yao.Tafadhali niambie ni mara ngapi mambo haya yamekutokea katika maisha yako kipindi cha nyuma (kabla ya miezi 12) na katika miezi 12 iliyopita.

0 = Haijawahi kutokea

1= Ilitokea mara moja

2 = Ilitokea mara 2

3= Ilitokea mara 3-5

4= Zaidi ya mara 5 katika kipindi cha miezi 12 iliyopita

		Tangia miaka15		Katika kipindi cha miezi 12 iliyopita					
		0	1		0	1	2	3	4
	Tiki kilichosahihi katika kila swali tangia ukiwa na umri wa miaka 15 nakatka miezi 12 iliyopita	HAPANA	NDIO		Hapana (0)	1 (mara moja)	Mara 1-2	Mara 3-5	Zaidi ya mara 5
53aDV	Mpenzi wangu alionyesha kunijali japo tulitofautiana	0	1	53bDVR	0	1	2	3	4
54aDV	Mpenzi wangu alieleza kutokubaliana nami pale tulipotofautiana	0	1	54bDVR	0	1	2	3	4
55aDV	Mpenzi wangu alinitukana sana	0	1	55bDVR	0	1	2	3	4
56aDV	Mpenzi wangu alinigombeza sana	0	1	56bDVR	0	1	2	3	4
57aDV	Mpenzi wangu aliondoka nyumbani baada ya kutoelewana	0	1	57bDVR	0	1	2	3	4
58aDV	Mpenzi wangu alisababisha nikaumia	0	1	58bDVR	0	1	2	3	4

59aDV	Mpenzi wangu aliheshimu hisia zangu kuhusu jambo lenye kikwazo	0	1	59bDVR	0	1	2	3	4
60aDV	Mpenzi aliziharibu mali zangu	0	1	60bDVR	0	1	2	3	4
61aDV	Mpenzi wangu alitishia kunidhuru au kunitupia kitu	0	1	61bDVR	0	1	2	3	4
62aDV	Mpenzi wangualinirushia kitu ambacho kingenidhuru	0	1	62bDVR	0	1	2	3	4
63aDV	Mpenzi wangu alinikunja mkono na alinivuta nywele na kuniumiza	0	1	63bDVR	0	1	2	3	4
64aDV	Mpenzi wangu alinifanyia fujo na alinisukuma	0	1	64bDVR	0	1	2	3	4
65aDV	Mpenzi wangualinipiga	0	1	65bDVR	0	1	2	3	4
66aDV	Mpenzi wangualinikamata kwa nguvu	0	1	66bDVR	0	1	2	3	4
67aDV	Mpenzi wangualinitisha	0	1	67bDVR	0	1	2	3	4

	kwa kisu au bunduki								
68aDV	Mpenzi wangualitumia kisu au bunduki kuniumiza	0	1	68bDVR	0	1	2	3	4
69aDV	Mpenzi wangu alinikungh'uta na kunipiga kwa kitu chakuniumiza	0	1	69bDVR	0	1	2	3	4
70aDV	Mpenzi wangualinikaba koo nisipumue	0	1	70bDVR	0	1	2	3	4
71aDV	Mpenzi wangualiniungu za makusudi	0	1	71bDVR	0	1	2	3	4
72aDV	Mpenzi wangualipendekeza suluhisho la kutokubaliana kwetu	0	1	72bDVR	0	1	2	3	4
73aDV	Mpenzi wangualinipiga teke	0	1	73bDVR	0	1	2	3	4
74aDV	Mpenzi wangualinilazimisha kufanya ngono bila kondomu	0	1	74bDVR	0	1	2	3	4
75aDV	Mpenzi wangualinifanyisha mapenzi kwa kutumia nguvu	0	1	75bDVR	0	1	2	3	4

76aDV	Mpenzi wangualinilazimisha kufanya mapenzi kwa njia ya mdomo kwa mabavu	0	1	76bDVR	0	1	2	3	4
77aDV	Mpenzi wangu alilazimisha mapenzi wakati ambapo sikutaka(lakini hakutumia nguvu)	0	1	77bDVR	0	1	2	3	4
78aDV	Mpenzi wangualitumia vitisho kunifanyisha ngono kwa njia ya mdomo	0	1	78bDVR	0	1	2	3	4
79aDV	Mpenzi wangualitumia vitisho ili nifanye mapenzi	0	1	79bDVR	0	1	2	3	4

80. Ni nani kati ya hawa wafuatao, aliewahi kukufanyia vitendo ulivyotaja hapo juu? (kama hakujibu swali lolote hapo juu nenda swali la 81. Jibu 1 kwa ndio na 2 kwa hapana

80a. Mwenzi wako Ndio ( ) Hapana ( )

80b. Ndugu Ndio ( ) Hapana ( )

80c. Rafiki Ndio ( ) Hapana ( )

80d. Jirani Ndio ( ) Hapana ( )

80e. Polisi Ndio ( ) Hapana ( )

80f. Mwanajamii Ndio ( ) Hapana ( )

Sehemu ya 8: Impact and Coping with Intimate Partner Violence – Swahili version

81. Ni kwa namna gani tabia ya mpenzi wako imeathiri masomo yako?

1. [ ] Masomo hayajaathirika 2. [ ] Mpenzi alinivurugia masomo 3. [ ] Kupoteza umakini

4. [ ] Kushindwa kusoma/Pata likizo ya ugonjwa 5. [ ] Kutojiamini 6. [ ] Kuathiriri mwili na akili. 7 [ ] Mengine (Taja).....

82. Je! umewahi kwenda sehemu zifuatazo kwa kuomba msaada?

	Ndio	Hapana
82a. Polisi	[ ]	[ ]
82b. Hospitali au Kituo cha kutolea huduma za afya	[ ]	[ ]
82c. Huduma za jamii/Huduma za hifadhi	[ ]	[ ]
82d. Kituo cha ushauri wa kisheria/mahakama	[ ]	[ ]
82e. Mtawala wa kimila/ kiongozi wa eneo lako	[ ]	[ ]
82f. Jumuia ya akina mama	[ ]	[ ]
82g.Mchungaji/ Kiongozi wa kidini	[ ]	[ ]
82h. Nyingine (Taja)	[ ]	[ ]
82i. Sikwenda popote kupata msaada	[ ]	[ ]

83. Kama ulienda kutaka upate msaada sababu zilikuwa ni zipi?

1 [ ] Kushauriwa na marafiki/ndugu 2.[ ] Kutoweza vumilia 3.[ ] Kuumizwa vibaya

4.[ ] Mpenzi wangu alinitishia au alijaribu kuniua 5.[ ] Alinifukuza nyumbani

6.[ ] Nyingine (Taja).....

84. Ni kwa namna gani kwenda kuomba msaaada kumesaidia kuleta mwelekeo mpya wa uhusiano na mpenzi wako?

1. [ ] Kujadili mambo na kuboresha mahusiano 2. [ ] Kujadili mambo na kuvunja mahusiano

Sehemu ya 9: The Gender-Equitable MenScale (GEMScale) – Swahili version

	Subscale1: ("Inequitable"GenderNorms) Kukosekana usawa wa jinsia katika maamuzi

		Chaguo		
		(1) Nakubalia na	(2) Nakubalia na kidogo	(3) Skubalia ni
85.	Ni wanaume wenye haki ya maamuzi ya aina gani ya kujamiana ifanyike.			
86.	Jukumu kuu la mwanamke ni kutunza nyumba na kuandaa chakula cha familia.			
87.	Wanaume wanahitaji kufanya ngono zaidi ya wanawake.			
88.	Hupaswi kujadili kuhusu kujamiana bali kutenda tendo tu.			
89.	Wanawake wabebao kondomu pamoja nao ni wale wanaojirahisi.			
90.	Kuwabadili watoto nepi, kuwaogesha, na kuwalisha chakula ni jukumu la akina mama.			

		Chaguo		
		(1) Nakubalia na	(2) Nakubalia na kidogo	(3) Skubalia ni
91.	Ni jukumu la mwanamke kuhakikisha hapati ujauzito.			
92.	Mwanaume ndiye mwenye kauli ya mwisho ndani ya nyumba			
93.	Waanaume wapo tayari waakati wote kufanya tendo la ndoa.			
94.	Kuna wakati ambapo mwanamke anapaswa kupigwa.			
95.	Mwanaume anahitaji kuwa na mwanamke mwingine hata kama mke wake amekamilika.			
96.	Iwapo mtu atanibughudhi nipo tayari kujihami kulinda hadhi nyangu kwa nguvu zangu zote.			
97.	Mwanamke anapaswa kuvumilia vurugu ili kuilinda familia isisambaratike.			
98.	Nitacharuka mke wangu iwapo atanishauri nitumie kondomu.			
99.	Ni sawasawa mwanamume akimzaba mkewe kama atakataa kufanya naye mapenzi.			
100.	Sintopenda kuwa na rafiki ambaye ni shoga.			
101.	Inanichefua nikutapo mwanaume anaenenda kama mwanamke.			

		Chaguo		
		(1) Nakubalia na	(2) Nakubalia na kidogo	(3) Skubalia ni
102.	Wenza wanapaswa kuamua kwa pamoja iwapo wanahitaji kuzaa.			
103.	Kwa mtazamo wangu mwanamke ana haki yakupendekeza kondomu itumike kama vile apendekezavyo mwanaume.			
104.	Iwapo mwanaume atampa ujauzito mwanamke ni jukumu la kulea mtoto ni la wote.			
105.	Mwanaume anapaswa kujua mpenzi wake anapendezwa na nini wakati wa tendo la ndoa.			
106.	Ni muhimu sana uwepo wa baba katika makuzi ya mtoto hata kama hawana mahusiano tena.			
107.	Amananda womanshoulddecidetogetherwhattypeofcontraceptivetouse.			
108.	Ni vema ukiwa narafiki mwanaume kumweleza ukiwa kwenye matatizo			

Appendix V: Ethical Clearance

MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES

Directorate of Postgraduate Studies

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Ref. No. MU/PGS/SAEC/Vol.XIV/

4th December, 2015

Mr. Elly Nollah Helela
MSc. Clinical Psychology
MUHAS.

RE: APPROVAL OF ETHICAL CLEARANCE FOR A STUDY TITLED: "EXPERIENCES OF INTER-PATENTAL VIOLENCE AND BEHAVIOR DEVELOPMNET AMONG 20-24 YEARS OLD UNDERGRADUATES IN DAR ES SALAAM"

Reference is made to the above heading.

I am pleased to inform you that, the Chairman has, on behalf of the Senate, approved ethical clearance for the above-mentioned study. Hence you may proceed with the planned study.

The ethical clearance is valid for one year only, from 2nd December, 2015 to 1st December, 2016. In case you do not complete data analysis and dissertation report writing by 1st December, 2016, you will have to apply for renewal of ethical clearance prior to the expiry date.

Prof. Andrea B. Pembe
DIRECTOR, POSTGRADUATE STUDIES

cc: Director of Research and Publication
cc: Dean, School of Public Health and Social Sciences