

ASSOCIATION BETWEEN HEARING IMPAIRMENT AND MARITAL
SATISFACTION AMONG HEARING IMPAIRED MARRIED INDIVIDUALS IN
ISINYA KAJIADO COUNTY, KENYA

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18/00671

A RESEARCH THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS OF THE DEGREE OF MASTERS OF ARTS IN COUNSELING
PSYCHOLOGY

INSTITUTE OF YOUTH STUDIES
TANGAZA UNIVERSITY

AUGUST 2025

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DECLARATION

I, the undersigned do declare that the research thesis is my original work and it is not attained through collaborative effort. It has not been previously presented to any other higher learning institution. The sources used in the document have been appropriately cited and duly acknowledged in full.

I do agree that this research thesis could be accessible for references and duplication at the discretion of the University.

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Signature.....

Date.....

We hereby certify that the research thesis is original peace of work, and fulfills all the University requirements.

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DEDICATION

This research thesis is dedicated to my family who encouraged and supported me throughout the Master's program, providing strength and cheering me when I wanted to give up. It is also dedicated to my two supervisors Dr Anne Mwayo and Dr. Pius Muasa, who guided the study, and to my late father Mr. Festus Muluwa who wished to see me soar high in education. Finally, I dedicate the paper to God for giving me the strength, wisdom, health, and finances to get this far despite the hard economic times.

ACKNOWLEDGEMENT

I express my heartfelt gratitude to my supervisors Dr. Anne Mwayo and Br. Dr. Wambua Pius Muasa for the support they have accorded me in completing this Research project. I would like to extend my sincere gratitude to my husband Jackson for financially cushioning me God bless you. My children Sarah, Jackie, Joshua, baby Claire and my twin (Yahaya) (Yahaya) (al., 2014) (al., 2014) (al., 2014) – grandchildren Tamara and Theodore you are wonderful and special people to me, thank you for your great understanding and encouragement. Thanks to all my college mates for checking on my progress and encouragement.

I am indebted to the all the lecturers who took me through different units in Tangaza university college may God bless you.

ABSTRACT

Hearing impairment is frequently perceived negatively as it emphasizes what some humans are challenged with, and as such is regarded as a hidden disability because it is not visible and may pass unnoticed unlike the physical disability. This study investigated the association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County, Kenya. The study addressed the following objectives: To assess the levels of hearing impairment among hearing impaired married individuals, to measure the levels of marital satisfaction among hearing impaired married individuals, and to establish the association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County, Kenya. The social model theory and the social exchange theory informed the study. The sample size of this study was 151 hearing impaired married individuals. The study used the correlational research design. The study made use of simple random sampling technique. The Hearing Handicap Inventory for Adults (HHIA) and the Couples Satisfaction Scale (CSS) were used for data collection. Data were analyzed using descriptive statistics specifically frequency and percentage, and inferential statistics such as the Pearson correlation coefficient and Chi-Square. The study utilized SPSS version 25 for data analysis. Findings indicated that 57% (n = 92) of the participants had significant hearing impairment, 40.4% (n = 64) of the participants were at mild-moderate hearing impairment. It was also found that most (73%, n = 118) of the participants were at low level of marital satisfaction, 21.4% (n = 40) of the participants had moderate marital satisfaction, while 5.6% (n = 2) of the participants scored high marital satisfaction. The study established that there was a negative significant relationship ($r = -.015$, $p = .045 \geq 0.05$) between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya Kajiado County, Kenya. The study recommended that the hearing-impaired married individuals may make effort to share their struggles and also seek psychological support, especially among those with significant hearing impairment and those with low marital satisfaction.

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ABBREVIATIONS AND ACRONYMS

CHS:	Center for Health Statistic
EPZ:	Export Processing Zone
GoK:	Government of Kenya
IDEA:	Individual with Disability Education Act
ILO:	International Labor Organization
KNBS:	Kenya National Bureau of Statistics
NIDCD:	National institute on Deafness and other Communication Disorders
PWDM:	People with Disability Movement
UN:	United Nations
UPIAS:	Union of Physically Impaired People Against Segregation
WHO:	World Health Organization
WCSNE:	World Conference on Special Needs Education

OPERATIONAL DEFINITION OF TERMS

No Hearing Impairment This is a complete or partial loss of the ability to hear from one or both ears. In this study, hearing impairment would mean a score from; 0-16 = No hearing impairment, 18-42 = Mild-Moderate hearing impairment, 44+ = Significant hearing impairment.

Marital Satisfaction This refers to a spouse's overall rating of being satisfied living with the partner in which one's needs, expectation and desires are met in a marriage (Čikeš et al, 2018). In this study, marital satisfaction would mean a cut-off score of 0-49 would be considered as low marital satisfaction, 50-89 would be moderate marital satisfaction and 90-150 would mean high marital satisfaction.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter provides context for the study from the global, regional and local, an explanation of the problem, and the study's objective. It also articulates the research objectives, research questions, study significance, scope and delimitation, and chapter summary.

1.2 Background of the Study

A meaningful human existence is one that comes with effective communication and understanding among humans of all ages. It is highly possible the case that every human being desires to hear, see, feel, touch, smell, and above all to be understood (Adugna & Ghahari, 2020). The reality of hearing impairment appears to be one of the obstacles militating against some of these human desires, and some people who are in marital relationship are faced with this challenge of hearing impairment. Mustapha (2009) submits that the term "disability" is used to denote hearing impairment. Hearing impairment is the total or partial loss of hearing in one or two ears, and it can be mild, moderate and severe (WHO, 2013). West (2021) argues that hearing impairment reduces quality of life among married people. These couples face difficulties not just with one another but also with social exclusion in various levels of day-to-day contacts with other people, which could result in negative health results (Bull et al., 2020).

According to WHO (2018), hearing impairment disturbs masses of people around the globe and it is projected to be the 4th top origin of disability worldwide (Cunningham & Tucci, 2017; United Nations, 2017). Statistics showed that 360 million individuals worldwide, with 32 million toddlers and 180 million grown-up adults, had hearing impairment in the year

2008, according to a study by the World Health Organization (2017). According to the most recent estimates, there will be approximately 466 million people with hearing impairment worldwide in 2018. It was further pointed; the foremost areas of the world faced by this condition of disabling hearing impairment are the South Asian, Asia Pacific as well as the Sub-Saharan African. The cost of unaddressed hearing impairment exceeds 750 billion dollars (WHO, 2017a). It is likely that hearing impairment is one of the factors militating against marital satisfaction among hearing impaired married individuals.

Kariuki (2018) defines marital satisfaction as a spouse's overall rating of being satisfied living with the partner in which one's needs, expectation and desires are met in a marriage (Čikeš et al, 2018). Abedi et al. (2018) also affirm that a meaningful relationship is a fundamental aspect of marriage and without it, marital commitment will be in danger of extinction. The difficulty of hearing loss might jeopardize a relationship, which may result in lessened emotional and physical intimacy. Marriage requires a meaningful relationship, therefore hearing loss can have serious consequences for a hearing-impaired partner, a greater amount of understanding as well as interpretation of behaviors are essential for marital connection (Soltani, 2015). Upholding to this assertion, Abedi et al. (2016) stated that several research has indicated that numerous factors contribute to marital satisfaction, including the desire for a partner, good temperament, trustworthiness, love and faithfulness, intimacy, avoiding coercive control, interactivity and showing interest in a partner, empathy, sexual fulfilment, notice of emotions, understanding of emotions, their source, and the proper management of emotions (Pourheydari, 2013). Hearing loss among spouses can be a stumbling block to marital satisfaction among hearing-impaired couples.

In the USA, a study by West (2020) pointed out the vast growing of hearing impairment among the populace of the American society. The research pointed that hearing

impairment was an alarming public health concern that affected 72.4% of Americans aged 65 and older. It was stated that hearing impairment was particularly imperative to study in matrimonial contexts since it distressed communication. The implication of poor hearing was that it affected communication and interactions between couples (Harrington et al., 2019). The effects of hearing impairment on partners comprise social situations avoidance, activities of daily living, social engagement, and frustration in terms of communication consequent of increased television volume (Preminger & Meeks, 2010).

The Canadian Hard of Hearing Association (CHHA) raises awareness of the issues that are important for persons living with hearing impairment. It promotes their integration in the Canadian society to remove any barrier to their participation and making every community a better place for them. The Disability Discrimination Act of 1992 in Australia mandates that facilities and services be made available to the hearing impaired people (Moodie et al., 2021). In addition, West (2020) held that women showed a greater level of depressive symptoms as compared to males (1.28 vs. 0.99) and 29% of the male showed fair or poor hearing in comparison with thirteen percent of the women. Statistics in USA recognize hearing impairment as one of the most widespread disabilities, comprising of approximately 2.1 percent of (3.9 million) of American adult ages 18 - 64 (Erickson et al. 2014; US Census Bureau, 2012; National Center for Health statistic, 2011). The implication of hearing impairment among hearing impaired married couples in the Western world may differ from that of the African context. Hearing impairment in marital relationship is a critical matter of concern that calls for a deeper investigation among the hearing impaired married individuals in Isinya, Kajiado County, Kenya.

In Ghana, Amedofu et al. (2006) made it known that hearing impairment was a reality that existed among the Ghanaian populace. This situation is seen among the children, the

teenager, young and older adults that are either single or married. Some of the expectations may include being heard and listened to, being love and respected, being emotionally present and regular clear communication. It was reported that out of 6, 428 patients, 5,734 (89.9%) aged 6- 80 years old were identified to be having hearing-impairment (>25dB), and for those in conjugal relationship, it was seen to be a militating factor hampering the progress of marital commitment.

A study conducted by Kigotho (2016), on barriers faced by students with hearing impairment on inclusive learning environment established that in African nations, the general awareness of hearing impairment is low. Cultural attitudes in some African countries see a person with disability as not “normal” and the use of abusive and dehumanizing names to describe them, hence causing many to feel unwanted in the society. The study by Amedofu et al. (2006) emanated from another human society and it focused specifically on the patients in the hospital, which comprised of the married and the single people. Hence brought the gap, as this current study focused on the association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County, Kenya.

In Kenya, Ryan (2015) argued that persons who have untreated hearing loss, may experience a widespread of socioeconomic issue, which is predicted to be the primary cause of disability worldwide by the year 2020. They are more likely to experience marital dissatisfaction. He further pointed that married persons over 50 years and older who had untreated hearing loss are more likely to report experiencing worry, irritation, rage, arguments, paranoia, and emotional instability in their marriage. The degree of marital problems also rises with the hearing loss severity. (Sennott, et al 2021) added that marriage is a commitment that requires patience and consistent effort from the spouses. When both partners experience some levels of satisfaction that outweigh their voiced or unspoken disagreements, a marriage

succeeds. Having an unstable marriage is difficult to achieve success because it depends on a variety of psychological, social, and religious factors. Numerous psychologists, sociologists, and anthropologists study various facets of marital stability, but little is known about how to attain and maintain marital satisfaction among hearing-impaired married people (Coffey, Warren & Gottfried, 2015; Gottman & Driver, 2015). The Kenya National Bureau of Statistics (KNBS, 2010; 2009) census projected that out of 38.7 million, 800,000 are hearing impaired. Statistics additionally show that there are 89, 840 males with hearing impairment out of the population of 19, 049 915 males, and 97, 978 females out of the population of 193, 621 73. This presents a percentage of 3.5 % of the population of Kenyans who suffer hearing impairment (Wanjiru, 2014).

However, several might not have been assessed due to cultural and community believe that disability, like hearing impairment is induced by witch craft, evil spirits or infidelity in Eastern and Central Africa. According to Mugoya and Witte (2015), marital dissatisfaction becomes more vivid among these couples who fall within hearing impaired condition. Also, when the cultural society have an unempathetic and a negative attitude towards their condition (Murunga, 2017; Masood, Turner, & Baxter, 2007).

There was little information about satisfaction in marital relationship among the hearing-impaired couples around the counties of Kenya. It was against this background that the researcher sought to ascertain the association between hearing impairment and marital satisfaction among the hearing-impaired married individuals in Isinya, Kajiado County, Kenya.

1.3 Statement of the Problem

Persons with hearing impairment often face not only medical challenges but also significant social and interpersonal issues. Studies have shown that hearing-impaired

individuals experience various forms of social exclusion, including discrimination, stigmatization, and being ignored within their communities (Kvam et al., 2007). These challenges extend into their marital lives, where hearing impairment has been linked to poverty and limited access to opportunities, particularly for married individuals (ILO, 2015).

In the context of marriage, hearing loss significantly affects communication — a cornerstone of marital satisfaction. West (2021) points out that impaired communication due to hearing loss contributes to emotional distance and declining marital satisfaction. Abedi et al. (2018) emphasize that a loving and meaningful relationship is foundational in marriage, and hearing loss often threatens this connection by reducing both emotional and physical intimacy. Soltani (2015) adds that hearing impairment can destabilize the marital foundation, often leading to conflicts, misunderstandings, frustration during conversations, and disagreements over simple issues such as television volume, especially where couples have varying levels of hearing impairment.

In Isinya, Kajiado County, Kenya, the situation mirrors these global concerns. Hearing-impaired married individuals in this area have reportedly experienced frequent conflicts, ranging from verbal altercations to physical violence, over issues rooted in communication breakdowns. Reports from local authorities (Local Chief's Office, 2022) cite numerous cases of domestic disputes, divorces, and separations among hearing-impaired couples, attributed largely to frustration and lack of effective communication. The practical problem, therefore, lies in the rising levels of marital dissatisfaction, conflict, and breakdown among hearing-impaired married individuals in Isinya. These issues are exacerbated by communication barriers, lack of mutual understanding, and social isolation, which threaten the emotional and relational stability of marriages within this population.

Despite the growing concern, there is a limited body of local research exploring the direct association between hearing impairment and marital satisfaction, particularly within the context of Isinya. Most existing studies have focused on the general social challenges of hearing-impaired individuals or have been conducted in other socio-cultural settings. This lack of localized, empirical evidence creates a significant knowledge gap regarding how hearing impairment affects marital dynamics specifically in Isinya, Kajiado County. This study, therefore, seeks to fill this gap by investigating the relationship between hearing impairment and marital satisfaction among hearing-impaired married individuals in Isinya, providing insights that could inform policy, intervention programs, and marital counseling approaches tailored to this unique population.

1.4 Purpose of the Study

The purpose of this study was to find out the association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County, Kenya.

1.5 Objectives of the Study

This study was based on one general objective and three specific objectives.

1.5.1 General Objective

The general objective of the research was to investigate the association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County, Kenya.

1.5.2 Specific Objectives

The specific objectives of the study were;

- i. To assess the levels of hearing impairment among hearing impaired married individuals in Isinya, Kajiado, Kenya.
- ii. To measure the levels of marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County, Kenya.
- iii. To establish the association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado, Kenya.

1.6 Research Questions

The research intended to investigate the following question;

1. What are the levels of hearing impairment among hearing impaired married individuals in Isinya, Kajiado County, Kenya?
2. What are the levels of marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County, Kenya?
3. What is the association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County, Kenya?

1.7 Significance of the Study

The study finding will provide insight into hearing impairment and marital problems among hearing-impaired individuals. The results will raise awareness among hearing-impaired individuals of the significance of assessment and therapy to ensure good marital quality of life. Making hearing-impaired people aware of their mental health and where to get assistance.

The findings of this study are expected to provide insights into how hearing impairment may influence marital satisfaction among affected individuals. This can help to better understand the unique challenges faced by hearing-impaired couples, potentially

guiding the development of support services and interventions aimed at enhancing relationship satisfaction within this population. The study may also contribute to the existing body of knowledge on disability and interpersonal relationships, particularly in the Kenyan context. The Counseling psychologist; may gain much understanding on the crucial nature of hearing impairment and marital satisfaction so they could possibly formulate intervention plans so as to render effective counseling services whenever there is an issue.

1.8 Scope and Delimitations of the Study

This study was conducted in Isinya, Kajiado County, Kenya, and focused on the relationship between hearing impairment and marital satisfaction among hearing-impaired couples residing in this specific area. The findings are therefore limited to this demographic and may not be generalizable to hearing-impaired individuals in other regions, who may experience different circumstances influencing their marital relationships. The study concentrated solely on marital satisfaction, rather than exploring broader marital issues or other aspects of disability.

1.9 Assumptions of the Study

The study assumes that all hearing-impaired married individuals of Isinya Sub-County in Kenya experience communication barriers that may influence their marital satisfaction levels. The study assumes that all extraneous factors like socio-economic status, educational level, and disability-related beliefs about disability cannot critically contaminate the original relationship under examination between hearing impairment and marital satisfaction.

Besides, it is also believed that the chosen sample is a true representation of the broad hearing-impaired married couples' population within the study area, hence permitting proper generalization of the results. Finally, the researcher ensures all the ethical issues such as

informed consent and privacy are properly observed, thus respecting participants' safety and willingness to take part in the research.

1.10 Chapter Summary

The chapter discussed the background to the research. It presented the statement of the problem and the study's objective. The research questions, study significance, scope and delimitation were also discussed. The next chapter concentrates on the literature review.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter conceptualizes two variables, specifically; hearing impairment and marital satisfaction. The theoretical framework appropriate for the research is discussed. It further carries out empirical literature review in connection to the objectives of the study, then the conceptual framework emerged. The chapter culminates with a summary.

2.2 Conceptualization of the Study Variables

The researcher conceptualizes two variables, they are: hearing impairment and marital satisfaction respectively.

2.2.1 Hearing Impairment

Hearing impairment is a handicap that affects millions of people globally. This condition is confronting humans of all ages; the youngsters, the adults and the older adults of all societies, whether married or unmarried. Hearing impairment is frequently perceived negatively as it emphasizes what some humans are unable to do, and as such is regarded as a hidden disability (Hyde & Power, 2003). This is due to the fact that it is invisible, in contrast to other types of disability like physical disabilities, which may be easily distinguished. Hearing loss may emanate either from childhood or in adulthood and the contribution of different factors, including genetic influence.

Diseases like bacterial meningitis, pyelonephritis, and malnutrition, especially a lack of vitamin A and iodine, which disproportionately impact impoverished households. The mortality and financial impact of hearing loss on children and their parents who are married is

significant. This is due to cognitive deficits in several areas, notably speaking, intellect, conduct, and other psychosocial initiatives, in afflicted children. Some of the indicators may include concentration issue, difficulty hearing others, anger, being confused, and irritation (WHO, 2012). According to WHO (2016), communication and cognitive abilities are all improved by early detection and good treatment of hearing loss (WHO, 2012).

Individual with disability education act (IDEA, 2013) defined hearing impairment as a condition where a person has difficulty using their hearing to process linguistic information. The quality of sound that can be heard with one's better ear is expressed in decibels (dB) to determine the degree of a hearing impairment. It is divided into four categories, the mildest of which has a minimum audibility range of 25 to 40 dB. The lowest volume that a person with moderate hearing loss can hear somewhere between 40 and 70 dB. When the lowest sound heard is between 70 and 95 dB, a person has tinnitus, and when it is 95 decibels or more, they have profound hearing loss (WHO, 2012). Whenever a noise is 90 decibels (5–10 times louder than regular speech) in order to be heard and even amplified speech cannot be comprehended, even with a cochlear implant, an individual would be seen as facing the challenge of hearing impairment. The term impairment is generally considered to be the proper terminology if one is speaking to someone's physical or mental health. Like "people with a vision disability," "people with a hearing problem," or "folks with a physical limitation" (IDEA, 2013).

2.2.2 Marital Satisfaction

Marital satisfaction is a strong concept that resonate in the institution of marriage, and it is of great concern to psychologists in contemporary times. This concern erupts from the view that marital relationship and its satisfaction is the foundation upon which healthy societies are based, and it is gaining increasing concern in modern societies (Carandang & Guda, 2015). According to King (2019), understanding the workings of relationships that

contribute to higher marital satisfaction remains a worthy goal in marriage institution. Therefore, marital satisfaction is a psychological condition that involves assessing how well a person's needs, expectations, and desires are met in a marriage. Equally, the more costs a marriage partner causes on an individual, the less satisfied one generally is with the marriage and with partner (Stone & Todd, 2006).

From the cognitive perspective, it is crucial to think about a spouse's behaviour in order to determine if it is costly or advantageous. If a spouse engages in an unfavourable (expensive) behaviour, this may be attributed to either the partner's characteristics (for instance, being perceived as lethargic) or the environment in which the behaviour occurred. Pertaining marriage satisfaction, ascribing costly behaviour to features of one's partner, rather than to circumstances surrounding their behaviour, is connected with decreased marital satisfaction. Maladaptive attributions occur more frequently with negative behaviours in marital problem-solving deliberations, and these attributions do not appear to be an outcome of either partner being depressed, having a neurotic personality, or tending toward physical aggression (King, 2019).

The way marriage partners interpret behaviour seems to be connected to how satisfied they are with their marriage. Marital satisfaction matters for married partners. This is the bedrock of attaining marriage goals. Forms of interaction between partners (whether one is impaired or not) could have emotional impact on how fulfilled they are with their matrimonial relationship. The pattern most often related to marital dissatisfaction is one of too much demand or emotional withdrawal from a partner. A marriage partner who offers good social support for his or her spouse adds to the partner's marital satisfaction, and some indications of marital satisfaction may include social supports, regular communication, presence,

faithfulness, cooperation, recognition of partner's emotion, and sexual satisfaction (King, 2019).

Smadi (2017) in his amplification pointed that marital accomplishment is the dream of every couple upon getting into the married life. Married people have a number of objectives for their union. These marriage objectives may be divided into three categories: instrumental, companionship, and personal growth. The order of the three sorts of marital objectives is dynamically changing with age. Young couples emphasize the personal growth goals, middle-aged couples prioritize the instrumental goals, and old couples focus on the companionship goals.

2.3 Theoretical framework.

The theories informing the research were; social model of disability and social exchange theories.

2.3.1 Social model theory

The social model theory (SMT) of disability has its background in the struggle of disabled humans for the attainment of their public rights. The theory has been promoted by a collection of organizations of disabled people in Britain since its first articulation by the Union of Physically Impaired People Against Segregation (UPIAS) in the year 1976 and by many tutors working in the field. It offers a way of conceptualizing the serious life struggles experienced by people with impairments that stresses the social, economic and environmental barriers to participate in meaningful activities in society (UPIAS, 1976).

UPIAS (1976) pointed that the health and welfare systems made the impaired persons feel unfairly treated and socially excluded. As a result of the lack of options, the limitations placed on their ability to exercise their right to free choice and self-determination, and the

inability to exert control over the support systems in their lives, they started to question the fundamental tenets of the healthcare model's long-standing superiority. Finkelstein (2001) alludes that humans are by nature frail, exposed, and physically deficient. Throughout history, those with abilities have worked so hard to achieve perfection, while the hearing-impaired vulnerability is perceived as a condition that divides the impaired people from what is regarded as normal (Finkelstein, 2001).

Further, the theory pointed that society was what renders those with physical disabilities disabled. This is based on the reason that when they are unnecessarily isolated and denied the opportunity to fully participate in society, disability is something that is added on top of their deficiencies (UPIAS, 1976). Through the prism of the SMT, disability is seen as an uneven bond within a society where people with disabilities' needs are typically given little to no respect. They are not able to obtain data, training, work, public transportation, accommodation, social and recreational activities on an equitable basis due to these hurdles, and their needs being taken into account minimally.

Due to the reason that the physical, organizational, and attitude restrictions that prevent some humans with disabilities from participating in society as a whole, they are considered to be handicapped (Wang,.et al 2021). Due to these obstacles, the hearing impaired are unable to have equitable access to resources in knowledge, training, work, public transportation, housing, and social and leisure activities. Owing to this unequal access, they may develop some degrees of frustration, and this could influence even their relationship beginning from their homes Markkanen, & Anger-Kraavi, (2019). Frustration may facilitate possible venting on their partners which could lead to marital dissatisfaction.

Nevertheless, the socialists argued that being impaired or handicapped does not diminish who they are as a human person Mladenov, (2017). The people with disability

movement (PWD) contends that changing society, rather than concentrating on each person's handicap, is the "solution" for the disability problem, and this is very crucial. For example, a consistent isolation and stigmatization of the hearing-impaired humans (who are at same time in marriage) could create some wounds that may be difficult for them to handle. Also, when hearing impaired married couples are confronted with the situations of deprivation and restriction in social engagements, upon their conditions, it may build up to meaninglessness with life, and this could hinder marital satisfaction that may induce extreme consequence on their marriage.

Social model theory of disability was used in this research to carry out a better understanding of the phenomenon known as "hearing impairment" being studied. This theory did not clearly articulate how marital dissatisfaction was induced by social model theory. Therefore, this study further employed the social exchange theory to further inform this study.

2.3.2 Social exchange theory

The social exchange theory (SET) is attributed to Carl Gasper (1958), who holds that almost all relationships are focused on "give and take". This possibly vary in regards to the degree of the relationship. He argues that humans engage in a relationship with expectations from their partners. Here, feelings, emotions, and material gifts are to be reciprocated for relationship to last (Nyutu, 2016). For example, the hearing-impaired couples may expect a "deeper understanding" from each other since they are all in similar condition. Inability to give or reciprocate such need may pave way for marital dissatisfaction among the couples.

The early 1960s saw the first consideration of social exchange theory, which later acquired significant traction in the family sciences. It came from the neoclassical economics, behaviorism, and utilitarianism philosophical schools. Early family science uses of social exchange theory resulted from sociologists' work (Blau, 1964; Homans, 1961), they focused

on the rational evaluation of self-interest in human social relationships. For example, from the perspective of the hearing-impaired couples, their personal interest matters, like the desire to be heard and understood by the larger human society. Possibly, when such a need is not met, it may build up to tension that may negatively affect oneself, ones' marital relationship, and the family as a whole. Afen (2022) affirmed by postulating that needs are significant because they reveal a person's internal state of mind and its subsequent exterior manifestation. Tensions can arise when needs are not addressed. Therefore, tension paves way for action.

Additionally, this theory proposed that human beings in social contexts would act in ways that would best serve their own interests. Social exchange theory functions on the supposition that individuals are generally sensible and engage in calculations of costs and benefits in social exchanges, even in marriage. Humans may actively seek out relationships and interactions that advance their wants, but they can also become targets of other people's needs when they are trying to satisfy their own needs. The person with fewer to gain in terms of meeting their basic needs through social exchange has a tendency to hold more power in that exchange (Gasper, 1958). For example, in terms of basic structural gains, a hearing-impaired married couple who is working and earning a good amount of money has less to gain from the other hearing-impaired partner who is always sitting at home and depending on the other partner. This constant reliance on the other partner for provision may lead to some degree of marital disenchantment in their marital relationship.

In addition, if a female partner feel she is putting more determination, time, and sacrifice into their given relationship than the male, she is likely to feel some resentment, dissatisfaction in the marriage and could attempt to get a more balanced rewards elsewhere, and this may pave way for negative consequence like divorce or violence crime, hence human desires maximizing profit and minimizing costs (Mitchell, Cropanzano, & Quisenberry, 2012).

One of the key notions on social exchange theory is the “reward and cost” approach. According to Homas (1961), costs are something of worth that is given up for something; it can also be the withdrawal of a reward, or punishment. Money is the most observable “cost” that humans exchange for some product, services, and even romantic relationship among partners. Based on the social exchange viewpoint, human behavior may be seen as driven by desire to seek rewards, and avoid potential costs and pains in any relationships.

Gasper (1958) holds that people feel most comfortable when they believe they are getting something out of a relationship that is roughly equivalent to what they are putting into it. This becomes “a-give-and-take” or an equality of gain situation. For example, among the hearing-impaired married couples, if one is always making enormous effort to communicate audibly, and always being attentive and caring, and the other partner appeared to be less concerned for the other, by not being attentive and not being caring, marital dissatisfaction may begin to creep in, and this dissatisfaction may lead to different possibilities. Reciprocity of essential elements of love is fundamental. Social exchange theory puts it that individuals or married couples who perceive the presence of reciprocity in their marital relationships are more likely to feel fulfilled and maintain such meaningful relationships. In the absence of reciprocity, there is a likelihood of marital relationship falling apart (Sprecher, 2001). People in marital institution possibly desire satisfaction in their relationship, to maximize gain being at equilibrium among partners, and to minimize cost or pain. A one-sided gain may not help in the progress of the marital relationship among hearing-impaired couples. A lack of gain between two partners may breed dissatisfaction in their marital affairs. It is upon this that social exchange theory is used in this research to better understand the phenomenon being studied, thus informing this study. The social model theory and the social exchange theory complement each other in the sense that the social model theory speaks about the vulnerability of some humans, for example, the hearing-impaired married people. They possibly desired to

be heard, understood, and supported within the family and the larger human society. The social exchange theory explains the importance of reciprocity in any relationship. A hearing-impaired couple who feels a lack of reciprocity of being listened to, being heard, understood, and being supported from the other partner could experience some degree of marital dissatisfaction in their marriage. The hearing-impaired partner may make effort to reach out to the other partner with the desire to also receive the same.

2.4 Empirical Literature Review

In this section, the empirical literature review in connection with the research objectives are carried out respectively.

2.4.1 Levels of Hearing Impairment among Hearing Impaired Married Individuals

The diminished ability in the face of hearing impairment can impede communication to greater degrees. Ramage (2019) opine that there is social as well as health costs connected to diminished hearing, and this is comprising of embarrassment, anxiety, depression, wounds, lesser quality of life, social isolation and participation restrictions in meaningful activities. The exhaustion that is frequently testified by persons with hearing impairment reveal their intense levels of concentration needed to process verbal information. Elder (2015) situates that hearing links a person to the social as well as physical surroundings. Consequently, hearing impairment has social repercussion as it affects one's ability to converse with other humans. Hearing impairment is a critical concern in marital settings since it has some impacts on communication and on good flow of matrimonial journey.

Globally, in the USA, (Jha, & Singh, 2021) submitted that hearing impairment among the married people was one of the growing public health concerns that has inimical effect on 72.4% of people aged 65 and above. Impairment is a significant health problem and a

lingering stressor for older people, and it is linked with adverse mental health results. The affected individuals may not be the only people struggling with the pain of impairment but other people that are also close to them. Bloom affirmed this by attesting that since the human person exists in social networks, the development of health problem like hearing impairment can impact not only the individual but also those close to them.

A study was conducted by Dillard et al. (2022), which focused on the prevalence of self-reported hearing loss and associated risk factors: findings from the survey of the health of Wisconsin, USA. There were 2,767 participants (50.7% men) with a mean age of 46 years (range: 21–74) Prevalence of self-reported hearing loss was high, 26.8% (24.4, 28.4) and was higher in men (30.3% [27.1, 33.4]) than in women (22.5% [19.9, 25.0]). The study concluded that reducing noise exposure and promoting health may mitigate hearing loss, which is a common public health concern. In another study conducted by West (2019) on hearing impairment and mental health among married people in the USA, it was found that women reported high level of depressive symptoms as compared to men (1.28 vs 0.99). It was reported 29% of men had fair or poor level of hearing impairment in comparison to 13% of their wives. The wives' fair hearing ($p = .006$) or poor hearing ($p = .006$) was noted to be connected with an increase in husbands' depressive indicators. Husbands' poor hearing was however not linked with an increase in wives' depressive symptoms. Similarly, in Canada, Ramage (2019) reported that a projected (19%) of adults (4.6 million) have at minimum mild level of hearing loss in the speech-frequency range (0.5, 1, 2 and 4 kHz), and that an even higher percentage of adults' populace of 35% (8.4 million) had some severe level of hearing impairment in the high-frequency range (3, 4, 6 and 8 kHz).

In Zambia, Kasebusha (2021) made it known that hearing impairment was the 4th most common impairment after physical, visual and cognitive limitations among the people. The

majority of people (including the married people) with hearing impairment living in low as well as in middle income countries, for example, Zambia. It was also claimed that hearing loss may be mild, moderate, severe, and profound. It can affect one ear or both ears which could pave way to struggle in hearing other peoples' conversations. Hard of hearing are people with hearing loss going from mild to severe. Some of the humans who are hard of hearing communicate over verbal language and as well may gain from hearing aids like cochlear transplants and some assistive devices (WHO, 2020).

A study was done by Kasebusha (2021), which focuses on the participation of hearing impairment learners in physical education and sports in Lusaka and Central Provinces of Zambia. Findings showed that the hearing-impaired people are faced with self-stigmatization (18.3%), lack of consideration (6.7%), lack of support (11.7%), and lack of exposure (3.3%). It was further established that the participants were at moderate level of hearing impairment (25.0%). In a more exploration, it was revealed that some of the participants reported their parents to be also struggling with hearing impairment. This may be a possible indication of genetic influence. This study was carried out among students in physical education and sports in Zambia. The study also employed the qualitative research method in gathering its findings, whereas this current study was determined to concentrate on hearing impairment and marital satisfaction among the hearing-impaired married individuals in Isinya, and it employed the quantitative research method in gathering its results, and utilizing correlation research design.

Similarly, in Uganda, a study carried out by Kayondo (2021), showed that the hearing-impaired people make up close to 3.4% (1.5 million people) of the total population of the country, about 0.2% are adults between 18years above, 0.6% and 1.1% are children aged 2-4years and 5-17 years respectively (Ministry of Gender, Labor and social development, 2019). Findings show a high prevalence of hearing loss among ages 2-17 years of which this age is

entirely spent in school. According to Uganda National Association of the Deaf (UNAD) reported that nearly 95% of the grownups (inclusive of the married couples) in Uganda are living with hearing loss. Batte et al. (2023) also reported high level of hearing impairment (11.7%) in the adults' population. It was found that occupational noise was a common cause of hearing loss in Uganda. Hearing impairment were found to be important health problems in the Ugandan population. The overall prevalence of hearing loss among industrial workers was 11.3% (40/354). Limited studies showed level of hearing loss among the Kenyan population and specifically the married individuals. There was paucity of study with regards to the hearing-impaired individuals in Kenya. Hence the need for this current research.

In Kenya, some of the humans who have hearing impairment experience several challenges and difficulties. This is due to communication obstacle among them, and other hearing persons in the community. At social events, keen interest and attention are usually given to them as a result of the nature of their condition (Kinyanjui, 2017). Researches have suggested that extreme noise exposure points to 16% of all causes hearing impairment (Nelson et al., 2005). Among some married people in the working arena, some of them are categorized by little or no formal education, therefore no knowledge on occupational safety procedure, environmentally friendly safety requirement. These humans are susceptible to unsafe working conditions, and noise being hazardous. Exposure to extreme noise is one of the major sources of hearing impairment. It has been projected that 500 million humans (both married and unmarried) might be at risk of developing hearing impairment (Rabinowitz, 2012). It was reported that about 84% of all workers in selected industrial plants in Nairobi were exposed to noise above 85dB (A). Noise levels in "Jua kali" (hot sun) sheds in Mombasa County were found to be above 90dB (A) which is extremely high (Milikau et al. 2016).

A study was conducted by Kilonzo (2022) on predisposing factors to noise induced hearing loss among metal workers in selected *jua kali* sheds in Mombasa County, Kenya. As one of the objectives of the study, looking at the levels of hearing loss among the workers in *Jua kali* metal work sheds within Mombasa County-Kenya, it was found that the percentage of workers with no hearing loss was 49.3%, those with moderate hearing impairment were 47.9% and 2.7% had severe hearing impairment. This study revealed very interesting findings, and its investigation was geared towards the workers in *Jua kali* metal work sheds within Mombasa County, whereas, this current study was aimed at investigating the association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County, Kenya.

2.4.2 Level of Marital Satisfaction among Hearing Impaired Married Individuals

Marital satisfaction is a positive as well as gratifying attitude that spouses have in diverse phases of marital relations like, conflict resolution, sexual relations, and consistent communication and bonding. Studies have pointed out that several constituents are part of marital satisfaction which are; seeking a companion, trustfulness, love and faithfulness, and intimacy. The constituents also include interaction, showing affection, sexual satisfaction, acknowledgment of emotions, understanding of emotions, their origin as well as management (Abedi et al., 2016; Pourheydari, 2013).

Papp (2018) suggests that some evidence suggests that women are more interested in connection and tenderness than men. Women believe that their husbands at times do not help them emotionally. When husband and wife interact well, it creates the impression of a balanced and harmonious marriage. In terms of their marriage, male and female contentment vary more in terms of degree than kind. When their sexual demands are met, women are often

more stable. It shows that men and women evaluate sexual enjoyment using different standards and have distinct expectations. Women are far less content than men with all other parts of life, but especially with their spouses' domestic assistance and their time spent with their children, which shows that family life's daily routine is crucial for fostering marital stability. Couples' relationships are impacted by hearing loss, which can reduce marital satisfaction. Marriage satisfaction may suffer as a result of hearing loss. Marriage is one area of life where hearing loss may have a detrimental impact. Communication between spouses might be put at risk if one or both have hearing problem (Papp, 2018). Lehane (2017) also argued that hearing loss could have a detrimental effect on marital satisfaction of couples. Hearing impairment did endanger relationship and led to low emotional intimacy. The outcome of the research pointed mental health problems were prevalent among the hearing-impaired couples and prevalence level of marital dissatisfaction was as high as 40%. The hearing-impaired females showed low level in respects to marital satisfaction and personality characters. McCabe (2014) affirmed that inasmuch as lack of communication could enhance different possibilities among the hearing-impaired couples, he noted that violence rate was high in hearing-impaired couples, that 3 out of 4 partakers (71.7%) reported being victims of emotional misbehaviors and more than half (56.5%) were victims of physical violence in marriage, which led to low level (47%) of marital satisfaction.

Morgan (2013) in his research in the UK, showed that most participants (70%) revealed marital satisfaction with their overall relationships and their hearing-impaired partners, while only 9% of participants had low level of marital satisfaction with their hearing-impaired partner. Participants with the sense of satisfaction, had shown good compatibility. It was also found that lack of conflict solving skills decreases marital satisfaction and leads to divorce in 90% of hearing-impaired married people. In Iran, Abedi et al. (2018) carried out a study on marital satisfaction among deaf couples. It claimed that connection is a fundamental

part of marriage and without it, marriage will be in danger of extinction. The study by Abedi et al. (2018) was specifically on the female hearing-impaired couples who are in their matrimonial relationship. This current study focused on the female and male hearing-impaired couples and investigate association between hearing impairment and marital satisfaction among hearing impaired spouses in Isinya, Kajiado County, Kenya.

In Nigeria, the concern whether the hearing-impaired couples experience marital fulfilment has become a subject of interest to many scholars. Asekun and Mojisola (2016) hold that many spouses find it challenging to express their rage, irritation, or even delight, which is especially challenging for hearing-impaired people. Communication pattern play a vital role in determining the success of a marriage or satisfaction couples derive from their marriage. The marriage's goal is to assist partners develop into mature, ego adults who can take care of themselves and nurture others no matter their circumstances, which may be frustrating when aspirations are unattainable. It was noted that 40% lack of proficiency led in language issues among the hearing-impaired couples, and this cause irritation as well as other issues including aggressive behavior, anxiety, and social exclusion in marriage. There is a high likelihood for marriage with poor and unproductive communication to experience distress and low satisfaction (Ndlovu, 2013).

According to Carbone (2010), marital dissatisfaction abounds with the hearing-impaired couples due to disenchantment among partners. He pointed that in order to reach intimacy, a person must be: (a) inclined to value and pursue closeness; (b) able to endure the extreme feelings that are inevitably present in strong relations; and (c) capable of self-disclosure, reciprocity, and sensitivity for others. A study was carried out by Asekun and Mojisola (2016) on psychosocial association of marital satisfaction among selected couples in Lagos Metropolis. Cases of dissatisfactions, separations and divorce married people were found to be on the increase in the recent time, particularly in Lagos metropolis. It was reported

that depression, anxiety and stress have significant influence on the marital satisfaction ($R^2 = 0.03$, $F(3,337) = 3.71$, $p < .05$) obviously unpleasant experiences within marriage can account for high prevalence of marital dissatisfaction. Walker et al. (2013) discovered that depressive symptoms among married couples, whether they are impaired or not are related to their levels of marital satisfaction, whereby higher scores on depression predicted lower level of marital satisfaction scores for the individual. This study by Asekun and Mojisola (2016) gives an interesting finding, and it rather concentrated on married people who do not have any hearing impairment, and there is scarcity of studies in the Nigerian society regarding levels of marital satisfaction among hearing impaired married people. There was also the scarcity of studies on the association between hearing impairment and marital satisfaction among hearing impaired married people, hence the need for this study in Isinya, Kajiado County, Kenya.

Similarly, Tukundane (2020) conducted a study on communication satisfaction, marital satisfaction and relationship maintenance in marriages in Uganda. He argued that marital satisfaction was not a static and stable concept, and many of the spouses whether they are hearing impaired or not do experience some changes in the amount of satisfaction during their common life as couples. It was found that marital satisfaction involves factors such as sexual satisfaction, communication and attachment. Also, it was reported that the lesser the communication skills in marriages, the more the challenges faced by the married people. Specifically, in person communication, nonverbal cues, tone of voice, and time committed to communication are needed to accelerate meaningful interaction and satisfaction in matrimonial relationship. As interesting as this study is, there was no report on marital satisfaction among the hearing-impaired couples. It also did not investigate the levels of marital satisfaction among its intended population. There is scarcity of studies around the East African region with regards to the levels of marital satisfaction among the hearing-impaired couples. Limited research has been conducted focusing on the association between hearing

impairment and marital satisfaction among hearing impaired spouses. Therefore, this current study filled this knowledge gap.

In Kenya, Kariuki (2018) brings to light that a pleasing and highly contented marital life can be one of the most serious factors in achieving happiness in one's marital relationship. On the other hand, at present, marital satisfaction is still a dream to be reached by some married people. Inasmuch as some married people are in good marital satisfaction, some, especially among the hearing-impaired couples are in pain and in total dissatisfaction of being married to their partner. The resultant effects of dissatisfaction in marriage are enormous.

Building on this, Kariuki (2018) study among the married couples in Murang'a County revealed that 3 out of 10 couples would not choose to marry their present spouse again. Furthermore, 29% of married Kenyan were on the position that their nuptials are going for the rocks, and 31% were uncertain whether they were in a happy or unhappy marital relationship, indicating generally low levels of marital satisfaction. Depression was identified as a key factor contributing to dissatisfaction, often stemming from infidelity by partners (Makeni, 2010). Moreover, marital dissatisfaction has been found to predict increases in depressive symptoms, with poor communication between partners being significant contributing factor. Additional influences included ethnicity, mental maturity, life expectations, and emotional intelligence of the couple. The high prevalence of divorces and separations show low level of marital satisfaction among the married people (Mungai, 2017). In a related study, Junius (2020), noted that according to Kenya's 2009 population census, 12.6 million people were married, yet by 2016, 15. % of these marriages had ended in divorce. Importantly, Kariuki's (2018) research focused on married individuals without impairments. Therefore, there appeared to be limited studies with regards to marital satisfaction among the hearing-impaired married individuals in Kenya. It was upon this gap, this current study was aimed at

investigating the association between hearing impairment and marital satisfaction among hearing impaired spouses in Isinya, Kajiado County, Kenya.

2.4.3 Relationship between Hearing Impairment and Marital Satisfaction among Hearing Impaired Married Individuals

Relationships are essential to matrimonial union, and without harmonious relationship, marriage would be in jeopardy. Abedi et al. (2016) argue that marital relationships may be at risk due to hearing loss which also reduces emotional and physical intimacy among married people. Intimate relationships need clear-cut behavioral analysis and understanding. Common issues among the hearing-impaired married people include miscommunication and misinterpretation of situations. A key component of handling some challenging situations encompasses their character, ability to resolve conflicts, cash flows, physical connection, and offspring. It is crucial that knowledge, instruction, and consultation are embraced (Abedi et al., 2016).

In the UK, Morgan (2013) conducted research on the impact of hearing impairment on marital satisfaction. Findings showed that the majority of the respondents (70%) expressed happiness with both their spouses and their overall intimate partners, and 9% of participants attested to be dissatisfied with their marital relationship. On the other hand, respondents who felt satisfied also mentioned having outstanding compatibility. In the investigation on the connection between degree of pleasure and chosen mode of communication, findings showed that communication style have an impact on marital satisfaction ($p = .001$). However, several of the individuals shared a similar communication approach with their spouses. The majority of the subjects (97.4%) communicate visually or through gesture. It was also found that deaf spouses who received training on living skills showed a substantial increase in the scores despite having poor marital happiness, temperament, spousal connection, problem solving, and finance ratings (Abdi et al., 2016).

In Nigeria, Studies conducted by Akinlabi (2013) observed that the coping methods and tactics used by the elderly and young impaired spouses were similar. Further, the researcher observed that respondents' experiences with bereavement did not alter depending on their marital status, including both elderly and young handicapped couples.

Additionally, Khalid (2017) conducted research on perceived causes as well as remedies of divorce among married couples in Kano metropolis: implications for marital counselling. It was reported that the couples differ in their perception of causes of divorce ($z = 4.22, p = 0.00$) the Male respondents perceived failed expectations as the major cause of divorce and unequal treatment among wives as the second major cause while the female respondents also perceived failed expectations as the major of divorcee but perceived poverty as the second major cause. The married males differ in their perception of the causes of divorce ($X^2 = 157.036, p = 0.001$). The married females differ in their perception of the causes of divorce ($X^2 = 101.022, p = 0.001$).

In Ethiopia, Girma (2021) stated that marital fulfillment as well as steadiness were important aspects of family life that shaped couples' health and well-being to a greater degree. Steady and pleasant marital relationships are needed not only for the health of the married people but also for their children and hence, for the society in the larger sense. Unstable and demanding marital relationship led to bigger emotional disorders that could pave way for marital dissolution among couples. Couples in their marriage are frequently satisfied when their needs in marriage are met. The research further established that marital satisfaction and stability with hearing impairment were significantly and positively correlated among married individuals ($r = .68, \alpha < .001$). Women's' marital satisfaction and stability were strongly and significantly correlated in spite of their hearing impairment $p = .74, \alpha < .001$. Marital satisfaction and stability were also strongly and positively associated among males ($p = .59, \alpha < .001$) (Girma, 2021). This study brought out interesting findings. However, there was no

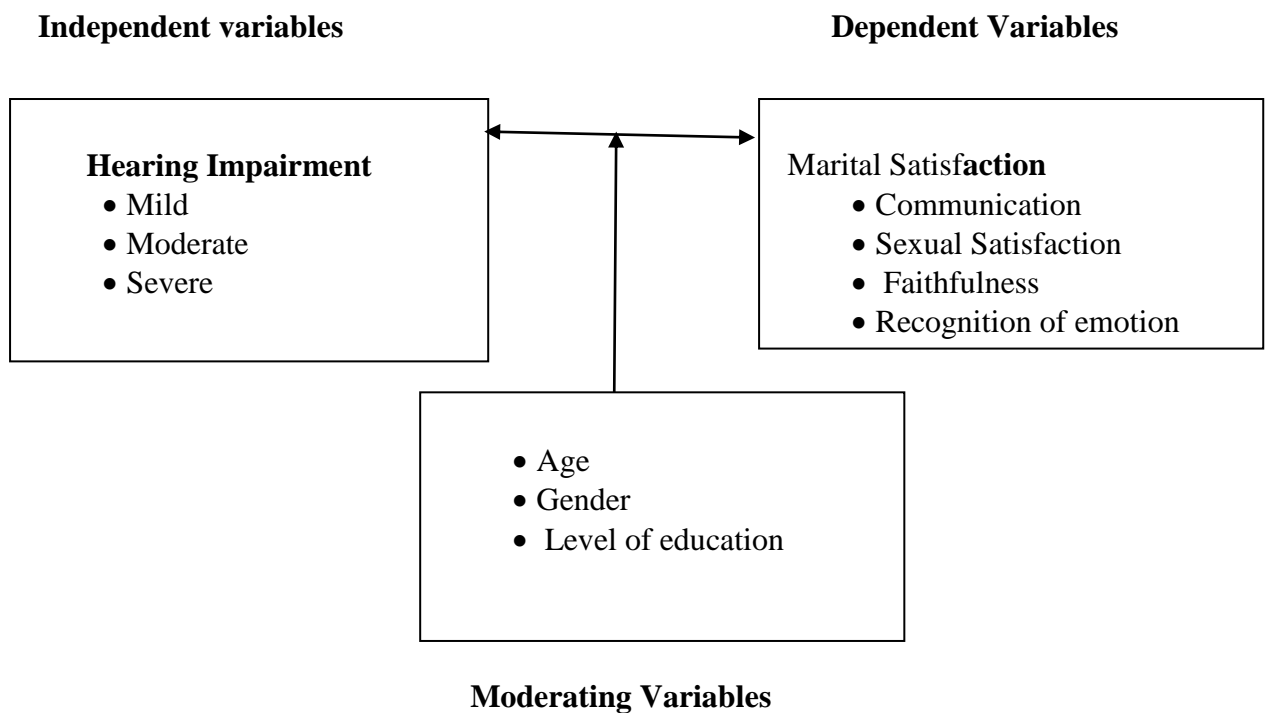
investigation on the relationship between hearing impairment and marital satisfaction among hearing impaired individuals. No study has articulated this gap and the current study seeks to find out the association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya Sub County, Kenya, as this could add more value to the body of knowledge.

In Kenya, individuals with disability who are married often encounters diverse challenges in life which can affect their marital satisfaction. Endurance, tolerance, and the ability to manage and navigate positively individual differences are essential for sustaining stable relationship, and productive disagreement can contribute to marital success of a marital relationship. A study by Kariuki (2018), investigated relationship between age at time of marriage and marital satisfaction among married couples in Murang'a County, Kenya. It was pointed that the determinant of marital satisfaction among non-hearing-impaired married couples to be; emotion regulation ($M = 3.55$, $SD = 1.01$), and ways of interaction ($M = 3.57$, $SD = 1.04$). It acknowledged that there were numerous factors that influence marital satisfaction, and it depends how married partners respond to expectations and duties imposed by cultures and social settings. Complimenting this, Njuguna (2020) researched n hearing loss among the older adult at the Kenyatta National Hospital in Kenya. The study comprised of 180 participants, in which 60% were males while 40% were females. Findings showed that the prevalence of hearing loss was 80.6%. Majority of the hearing loss was sensorineural (58%) and only 22% of the participants reported mild to moderate hearing loss. While these studies highlighted on marital satisfaction in the general population and the prevalence of hearing impairment in Kenya, there is still a limited study directly researching on the relationship between hearing impairment and marital satisfaction, thus the need for present study to bridge this knowledge gap.

2.5 Conceptual Framework

Conceptual framework indicates how key concepts in research are organized and how the variables could be influencing each other. It explicates and aids in comprehending the phenomenon being studied (Shikalepo, 2020).

Figure 1: Conceptual framework



Source: Researcher (2024)

According to Figure 1, this research investigated the association between hearing impairment and marital satisfaction and, and it consist of two variables, which are variable A and variable B. The conceptual framework was shown on the purpose that variable A, which is hearing impairment, may possibly have relationship with variable B, which is marital satisfaction, and the probable influence of moderating variables like age, gender and level of education. Hearing impairment may be seen as the complete or partial loss of the ability to hear from one or the two ears, and it may be considered as either mild, moderate, severe or profound, and it is made up of some of the following indications; being confused, anger, difficult hearing others and irritation. While marital satisfaction may be seen as a

psychological state that comprises assessing the degree to which a person's needs, expectation and desires are met in a marriage. This consist of the following indications; communication, sexual satisfactions, faithfulness and recognition of emotion.

2.6 Chapter Summary

This chapter attended to the conceptualization of the two research variables, which were; hearing impairment and marital satisfaction. It did justice to the theoretical framework. The empirical literature review was carried out in line with the objectives. In so doing, the conceptual framework was developed from the reviewed literature. The next chapter attends to the methodologies of the study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter offers explanations of the suitable methodologies that were employed. It discussed the research design, the location, target population, sampling design, sampling technique, and sample size calculation. The chapter further described the tools, the pre-testing of the tools, validity, reliability, and methods of data collection, then analysis. The chapter looked at the ethical consideration, envisaged impact, and it ended with the summary.

3.2 Research Design

As stated by Walliman (2017), this is seen as the roadmap used by the researcher to arrive at objectives of a study. This current study adopted quantitative method. Quantitative method of research focuses on numbers. It reduces human experience to measurable units (Sahaya, 2017). The study applied the correlational research design since it investigated the association between hearing impairment and marital satisfaction. Correlational research design demonstrates degree of association between research variables (Rose & Shevlin, 2016). Quantitative data were measured, and then made to address the research problem. In so doing, statistical inferences with regards to the population under investigation was drawn from the data acquired. This aided processing, analyzing, interpretation, and thus gave some insight into the research problem.

3.3 Location of the Study

This research was conducted in Isinya, Kajiado County, Kenya. Isinya is a small town in Kenya's Kajiado County's, Kajiado East Constituency. It is 88.70 sq. km size of about 19 km north of Kajiado town, the district capital, and 58 km South of Nairobi City along the road

to Arusha. There are 8,670 people living in Isinya. Due to its less expensive operating costs, the region is home to a private airstrip called Orly Airpark, which some aviation schools and pilots prefer using over Nairobi's Wilson Airport. Isinya has a moderate, temperate environment with an average temperature of 19°C and annual precipitation of roughly 533 mm. Owners of undeveloped land in Isinya have a variety of options for turning their underutilized properties into profitable assets. The local people are primarily of Masaai. According to the 2019 Kenya Population and Housing Census estimated to be over 1, 118, 840 persons. It has a yearly growth rate of 5.5%, and a population density of 51 people per km². The people living with hearing impairment are also part of the general population of Isinya sub-County. The leading economic activities of the people consist of pastoralism, livestock herding, tourism as well as agriculture-horticultural. Therefore, the nature of Isinya's economic activities provides a practical and accessible work environment for individuals with hearing impairment. Engaging in manual, task-based work allows deaf individual to be productive and economically self-reliant.

3.4 Target Population

According to Quinlan et al. (2019), target population are components, people, subjects, or entities that are being researched on, and have a similar or related nature. Target population must have distinctive features that permits all units in the sum total to be qualified for taking part research. The target population for this research were 250 hearing impaired married individuals in Isinya Sub-County. The populations are within the ages of 25 to 60 years. All participants are expected to be married individuals and they are living with hearing impairment. These participants aided the study in gathering relevant and reliable data for the objectives of the study (EPZ-Office of the human resources, 2023).

3.5 Sampling Design

Sampling design choosing of group of people or things from a population so that the chosen group has aspects typical of the qualities found in the complete group (Selvam, 2017). This section therefore focused on the sampling procedures which comprised of sampling technique, the sample size determination and sampling frame.

3.5.1 Sampling Techniques

The study employed simple random sampling to select participants from the target population of hearing-impaired married individuals in Isinya, Kajiado County, Kenya. This method ensured that every eligible individual had an equal chance of being included in the study, minimizing selection bias and enhancing the generalizability of the findings. To implement this, the researcher first met with the study participants and compiled a comprehensive list of hearing-impaired married individuals, ensuring representation of both male and female participants. All the participant in the list were issued with a number against their listed names. The researcher further used a computer-generated random number selector to systematically pick individuals from this list. In cases where a selected individual declined participation, the researcher replaced them by selecting the next randomly generated number to maintain the required sample size. This approach ensured that data collection remained objective, inclusive, and representative of the population under study.

3.5.2 Sample Size Determination

This refers to the number of research respondents, observation elements or items that a researcher intends to examine in order to allow generalization of the findings to the bigger population (Bryman, 2016). The formula of Krejcie and Morgan (1970) was used to figure out sample size of the study. It applies a 95% confidence interval and an approximate error of 5%.

$$S = \frac{x^2NP(1-P)}{d^2(N-1) + x^2P(1-P)}$$

Where;

S = stands for the requisite sample size

x^2 = the table value of Chi-square for 1 degree of freedom at the desired confidence level (i.e. 3.841)

N= the population size

P= the population proportion (0.50 is used to provide the maximum sample size)

1 – P = estimated percentage of failures

d^2 = square of the utmost allowance for inaccuracy between the true percentage and sample proportion (in the study, it is set at 5%)

Hence, based on the target population of 250 and applying a 95% confidence interval with an approximate error of 0.05, the results are processed in the calculation as;

$$S = \frac{1.96^2 \times 250 \times 0.5(1-0.5)}{0.05^2 \times 250 + 1.96^2 \times 0.5(1-0.5)} = \frac{1200500}{7927} = 151.4$$

Therefore, the sample size for this research was 151 participants.

To account for potential participant loss or data loss during data collection, an additional 10% of the respondents and questionnaires were included. Mugenda and Mugenda (2011) define participant loss as the withdrawal of participants,

misplacement, or damage of research questionnaires during data collection or analysis. They recommend adding 10% to the sample size to compensate for such occurrences. In this study, 15 extra participants were included (10% of 151 = 15), bringing the total sample size to 166 respondents to ensure the completeness of the data collected.

3.5.3 Sampling Frame

A sampling frame is seen as list of entire populaces of a researcher’s concern from which the sample is picked. Sampling frame is a set of individuals, objects or elements from which a researcher can pick representative sample for the study (Bryman, 2016). Table 1 displays the sampling size for the hearing-impaired couples in Isinya Sub County, Kenya.

Table 1: Simple Random Sampling

Isinya Sub-County	Target population	Sample size	Percent
Male and female married individuals	250	151	
Extra participants		15	
Total	250	166	100%

According to table 1, the target population of this research were the hearing-impaired married individuals, which were 250, having a sample size of 151, with participant loss, or data loss of (15) at a 100.0%. Therefore, the sample size of this research was 166 hearing impaired married individuals in Isinya Kajiado County, Kenya.

3.6 Research Instruments

According to Flick (2017), a research instrument is a device that a researcher make use of to collect information for the aim of responding research or objectives or questions. In

this study, standardized questionnaires were employed to collect information from the participants of the study.

The socio-demographic characteristics of the participants were collected using a structured questionnaire, which captured key variables such as age, gender, education level, duration of marriage, and level of hearing impairment. This involved cross-checking responses for completeness, identifying and addressing inconsistencies, and removing duplicate or erroneous entries. The data were analyzed using descriptive statistics to ensure that the demographic distribution was representative of the target population.

The Hearing Handicap Inventory for Adults (HHIA) was used to gather data. The HHIA was developed by Ventry and Weinstein (1982). It is a 25-item self-assessment scale composed of two dimensions (emotional and social/situational). It is designed to assess self-perceived hearing handicap in adults. It is a Likert scale of 0-4, where 0 = No, 2 = Sometimes, 4 = Yes. Hearing Handicap Inventory for Adults scores range from 0-16 = No impairment, 18-42 = Mild-Moderate hearing impairment, 44+ = Significant hearing impairment.

Furthermore, the Couples' Satisfaction Index is a 32-item tool that was established by Fincham and Bradbury (1987). The scale is designed to measure satisfaction in marital relationship. The scale is divided into 3 parts; section 1 (items S1-S8) assesses subjective evaluation of relationship. Section 2 (items E1-E18) measure emotion regulation, and section 3 measure pattern of interaction among couples. According to developers, the scores range from low marital satisfaction (0-49), moderate marital satisfaction (50-89), then high (90-150) marital satisfaction.

3.7 Validity and Reliability

This section discussed the validity and reliability of the research instruments that were utilized in the research

3.7.1 Validity of Instrument

This is a procedure of validation of the research instrument so as to increase its level of trustworthiness for accurate information (Vogel & Draper, 2017). The researcher embarked on content and construct validation, and the internal consistency of the research scales. The couple's satisfaction scale was validated in a study that was carried out by Smadi (2017) among a sample of Women in Amman City. It was found to be accurate. The value of the stability coefficient was α (0.942). The Hearing Handicap Inventory for Adults (HHIA) was also validated by Aiello et al. (2011) in Brazil. Aiello and colleagues conducted a validation study for the Brazilian Portuguese version of the Hearing Handicap Inventory for Adults (HHIA), originally published in *Braz J Otorhinolaryngol.* in 2011. The study included two groups: a control group of 30 normal-hearing adults (15 women, 15 men, mean age 38.5) and a clinical group of 113 adults with post-lingual, bilateral hearing impairment (52 women, 61 men, mean age 53.6). Within the clinical group, hearing loss ranged from mild to profound, with a mean better-ear threshold of 49.

3.7.2 Reliability of Instrument

Reliability is the consistency and the degree to which findings may be replicated when the research is conducted again under the same circumstances. By examining whether findings are consistent across time, amongst observers, and inside the test itself (Chiang 2015). The couple satisfaction index was used in the USA, in a research conducted by Bruner, Kuryluk and Whitton (2015). The study sample 189 undergraduate students in love relationship. It was reported that the couple satisfaction index (CSI) has Cronbach's alpha values ranging from 0.62 to 0.90 reliability. Also, Resch and Alderson (2014) in Canada indicated CSI Cronbach's alpha coefficient of 0.96.

Additionally, the Hearing Handicap Inventory for Adults (HHIA) was used in a study carried out by Aiello et al. (2011) in Brazil. The questionnaire was applied to 30 normal hearing

(Group A) and 113 hearing impaired (Group B) persons. The Flesch's scores showed that the questionnaire was easy to read. Cronbach's alpha and Pearson's correlation showed high internal consistency. There was no significant difference between test and retest scores. Besides, correlation between these two scores was also high and significant. HHIA's internal consistency using the Cronbach's alpha was 0.92, 0.91 (social) and 0.84 (emotional). It was also used in a study by Njuguna (2020) among older adults in Kenyatta national hospital Kenya, and it was found to be reliable, with a Cronbach's alpha of 0.92.

3. 8 Pre-testing of Instruments

Faux (2010) stated that pretesting is testing a set of questions to be used on a population. It permits making any crucial amendments in order to increase credibility of results. The pre-testing sample of this study was carried out by identifying the hearing-impaired individuals in Thika, which is a different location. At this point, 15 equivalents 10% of the sample size (151) was used for the pre-testing. Mugenda and Mugenda (2003) affirmed this procedure and recommended that 1-10% of pre-test sample was enough.

The researcher sought the permission of the hearing-impaired individuals before requesting them to respond to the questionnaires. The researcher informed the participants of the nature of the research, and that the respondents have the right to decline from participating whenever they felt to do so. There was a time allocation of 25 minutes given to the participants to respond to the questionnaires. The data obtained from the pre-test was statistically analysed.

3.9 Data Collection Procedure

Accurate data collection is crucial to ensuring the reliability and validity of research findings (Flick, 2017). To facilitate this, the researcher obtained all necessary approvals before conducting fieldwork. This included securing a research authorization letter

from the Tangaza University Institutional Scientific Ethics Review Committee (TU-ISERC) and obtaining clearance from the National Commission for Science, Technology, and Innovation (NACOSTI).

To identify and recruit participants, the researcher first visited locations where all hearing-impaired individuals commonly meet, which including the Isinya flower farms, the Deaf community church, and the Export Processing Zones (EPZ) in Kitengela. The researcher then sought permission from the relevant authorities to access the site and use the available halls on the actual data collection day, and it was granted. A research assistant, who is a degree holder, was engaged to support logistical arrangements and ensure smooth interaction with potential participants (Jackie & Jean, 2017). The study specifically targeted the married hearing-impaired individuals. During the recruitment exercise, the researcher first sought a list of the hearing impaired individuals within the identified locations from where she got the married individuals. From this list of only married hearing impaired individual, the researcher then used a random sampling technique to select the study participants. The selection process was conducted before meeting the participants, ensuring that only eligible, randomly chosen individuals were invited to take part in the study. Thus this method eliminated bias and maintained the integrity of the sampling process.

Once the random sample was determined, the researcher returned on a later date to meet with the selected participants and informed them that they had been selected. The research objectives were explained in detail, and participants were given the opportunity to ask questions and seek clarifications before committing to the study. Those who agreed to participate were invited to attend a formal data collection session on a scheduled date.

On the data collection day, the selected participants assembled in a designated hall. The research assistant issued each of the participants with a consent form. He helped in reading through to the individual who were not able to read. Only those who signed and

returned the consent form were issued the questionnaire to fill. The questionnaire was not attached to the consent form; rather, it was given separately after participants had voluntarily agreed to take part in the study.

Participants then proceeded with the exercise of completing the questionnaire. Upon completion, the researcher collected the filled questionnaires and ensured their safekeeping for later analysis. Finally, the participants were debriefed, thanked for their time and contribution, and assured of the confidentiality of their responses. There were no participants who required additional psychological support during or after the exercise.

3.10 Data Analysis

Kothari (2015) sees data analysis as the process of computing certain metrics and looking for connections between groupings of data. In light of this, the findings of this research was presented in frequencies as well as percentages. Table 2 gives the steps that were used in analyzing the data.

Table 2: Data Analysis

Data analysis of:	Variable type	Purpose of the test	Type of the test
Demographic characteristics	Categorical	Gather information about demographics Characteristics	Descriptive Statistic; frequencies, percentiles.
Objective One	Scale	To measure the levels	Descriptive statistical score
Objective Two	Scale	To measure the levels	Descriptive statistical score
Objective Three	Two Scales	Test relationship between two scale variables	Pearson's Correlation Coefficient

According to Table 2, the Statistical Package for Social Sciences (SPSS) version 24 was used in examining quantitative information gathered. Descriptive Statistic was utilized in gathering demographic information of participants of this study; using frequencies and percentiles. Inferential statistic, for example, the Pearson's coefficient correlation analysis was used. A significance level of ≤ 0.05 was considered statistically significant. The first objective; levels of hearing impairment and the second objective; levels of marital satisfaction were scored and measured respectively using descriptive statistics scores in order to gauge their levels, then presented in summary tables. The third objective of the study, which proposes to establish the association between hearing impairment and marital satisfaction among hearing impaired individuals in Isinya Sub County, Kenya, was analysed using Pearson's Coefficient Correlation analysis.

3.11 Ethical Considerations

According to Denzin and Lincoln (2011), ethical considerations are fundamental principles that guide research design and implementation based on best practices in empirical social studies. To uphold these principles, the researcher sought and obtained all necessary approvals before conducting fieldwork. These approvals included a research authorization letter from the Tangaza University Institutional Scientific Ethics Review Committee (TU-ISERC) and an authorization permit from the National Commission for Science, Technology, and Innovation (NACOSTI).

Prior to data collection, the researcher provided participants with detailed information about the study's objectives, ensuring they could make an informed decision regarding their participation. The principle of voluntary participation was strictly adhered to, and participants were assured that their involvement was entirely optional and that they could withdraw at any stage without facing any consequences.

To further protect participants, the consent form included the contact information of a designated person whom they could reach out to in case they experienced any distress or required further clarifications regarding their participation. Additionally, participants were given a copy of the signed consent form for their records.

To protect participants' privacy, personal details such as names and other identifying information were not included in the questionnaires. Additionally, the consent forms and questionnaires were kept separate to prevent any potential linkage between participants' responses and their identities. The collected data was securely stored and used solely for academic purposes.

Given that some participants might have faced difficulties in reading, the researcher provided assistance to those who required help in understanding the consent form and questionnaire. A trained research assistant fluent in Kenyan Sign Language (KSL) was engaged to facilitate communication and ensure that all participants fully comprehended the study requirements before giving their consent.

The researcher took all necessary precautions to ensure participants' safety and well-being throughout the study. To minimize potential stress, participants were allocated 30 minutes to complete the questionnaire at their own pace. After data collection, a trained counselor conducted a debriefing session to address any concerns and provide emotional support where necessary. Fortunately, no participants required additional psychological assistance.

3.12 Envisaged Impact of the Study

It was hoped that this research may bring significant insight on the how the levels of hearing impairment affect marital satisfaction among the hearing-impaired married individuals. It was hoped that the study findings may create awareness among the hearing-

impaired married individuals, leading to re-evaluation of their relationship and commitment so as to possibly re-ignite their love, to attain satisfaction if such is found lacking in their marriage as well as seeking guidance. Likewise, the researcher hoped that this study may enlighten the policy makers and other stakeholders about mental health concerns of hearing-impaired married individuals living among the hearing people who do not understand their language and culture. Thus, encouraging the public to learn sign language to enhance communication with deaf individuals who are part of the families on the other hand, the study is hoped to spell out the aspects of marital relationships that hearing-impaired individual struggle with, hence prompting the psychologist working in the relevant field of family and marriage to formulate an appropriate intervention to support the hearing-impaired individual experiencing marital distress.

3.13 Chapter Summary

This chapter provided a detailed account of the methodologies used in the study. It outlined the research design, location of the study, target population, sampling design, sampling technique, and sample size determination. Additionally, it discussed the research instruments, pre-testing procedures, validity, reliability, data collection methods, and data analysis techniques.

A key aspect covered in this chapter was ethical considerations, which ensured that participants' rights, privacy, and well-being were safeguarded throughout the study. Measures such as informed consent, confidentiality, and protection from harm were emphasized. Furthermore, accessibility provisions were made to assist participants who had difficulty reading.

After data collection, all completed questionnaires were carefully reviewed for completeness and then securely transported and stored in a locked facility to ensure

confidentiality and prevent data loss. The collected data was later processed and analyzed using appropriate statistical methods.

CHAPTER FOUR

FINDINGS

4.1 Introduction

This chapter presents the findings of the study. It shows the response rate of the study. It further articulates the demographic characteristics of the study participants, and culminates with findings of the study in connection to the objectives of the study respectively, and then the chapter summary.

4.2 Response Rate

In this section, the response rates of the questionnaires distributed to the participants of this study are presented. Table 3 reveals the distributions of the questionnaires.

Table 3: Response Rate

Sample Size	Distributed Questionnaires	Returned Questionnaires	Spoiled Questionnaires	Properly filled Questionnaires
151	166	166	6	160

As seen in Table 3, the sample size of participants was 151. In order to address the concern of potential participant loss or data loss during data collection, the researcher added 15 extra questionnaires (10% of sample size) to make up 166 questionnaires and distributed to the participants. Out of the 166 questionnaires that were distributed, 166 were returned, 6 of the questionnaires were spoiled. In this regard, the properly filled questionnaires were 160, and were used for analysis. Therefore, this study had a response rate of 96.3%.

4.3 Demographic Characteristics

This section presents the demographic details of the participants of this study. These are the age, gender and their educational level. The outcomes are presented in Table 4.

Table 4: Demographic Characteristics

Age	Frequency	Percentage
28-33	69	43.1%
34-39	59	36.9%
40-45	29	18.1%
46-51	3	1.9%
Total	160	100.0%
Gender		
Male	71	44.4%
Female	89	55.6%
Total	160	100%
Level of education		
Certificate	70	43.8%
Diploma	49	30.6%
BA	41	26.3%
PhD	0	0.0%
Total	160	100.0%

As seen in Table 4, findings indicated that the hearing impairment married individuals between 28-33 years old were at 43.1% (n = 69), while 1.9% (n = 3) were within the age range of 46-51 years old. With regards to gender, the females were the highest participants, being at 55.6% (n = 89), while the males were at 44.4% (n= 71). Level of education revealed that 43.8% (n = 70) had certificate, while 26.3% (n = 41) had BA.

4.4 Levels of Hearing Impairment among Hearing Impaired Married Individuals in Isinya, Kajiado, Kenya

The first objective of this study was to assess the levels of hearing impairment among hearing impaired married individuals in Isinya, Kajiado, Kenya. Descriptive statistical analysis was employed in this analysis, and data were computed and scored so as to assess the levels of

hearing impairment. The Hearing Handicap Inventory for Adults (HHIA) was used to gather data. It is a 25-item self-assessment scale. It is a Likert scale of 0-4, where 0 = No, 2 = Sometimes, 4 = Yes. Handicap Inventory for Adults scores range from 0-16 = No impairment, 18-42 = Mild-Moderate hearing impairment, 44+ = Significant hearing impairment. Findings from the analysis are presented in table 5.

Table 5: Levels of hearing impairment among hearing impaired married individuals

Levels	Frequency	Percentage
No impairment	0	0%
Mild-Moderate hearing impairment	68	42.5%
Significant hearing impairment	92	57.5%
Total	160	100%

As indicated in Table 5, findings showed that a substantial number (n = 92, 57.5%) of the hearing impaired married individuals had significant hearing impairment. Based on the results on significant hearing impairment among hearing impaired married individuals in Isinya, Kajiado, Kenya, this suggests that within a group of married individuals who already have hearing impairment, their level of hearing loss is notably severe or more pronounced. The term "significant" in this context likely refers to a substantial or clinically meaningful degree of impairment. This could mean the hearing loss is severe enough to affect communication, daily functioning, or overall quality of life. This might be pointing to a specific impact that hearing loss has on married life.

4.5 Levels of Marital Satisfaction among Hearing Impaired Married Individuals in Isinya, Kajiado County, Kenya

The second objective of this study was to measure the levels of marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County, Kenya. Descriptive statistical analysis was conducted in this regard, and the data gathered from the participants were computed and scored in order to measure the levels of marital satisfaction. Couples' Satisfaction Index is a 22 item tool. The scale is designed to measure satisfaction in marital relationship. It is a Likert scale of 0-6, where; 0 = to never agree, 1 = almost always be in conflict, 2 = commonly disagree, 3 = sometimes disagree, 4 = nearly always concur, 5 = always concur. The scores range from low marital satisfaction (0-49), moderate marital satisfaction (50-89), then high (90-150) marital satisfaction. The results from the analysis are given in Table 6.

Table 6; Levels of hearing impairment among hearing impaired married individuals

Levels	Frequency	Percentage
Low marital satisfaction	118	73.75%
Moderate marital satisfaction	40	25.0%
High marital satisfaction.	2	1.25%
Total	160	100%

As seen in Table 6, findings from descriptive statistical analysis demonstrated that 73% (n = 118) of the hearing-impaired married individuals in Isinya, Kajiado County Kenya, had a low score on marital satisfaction, while 5.6% (n = 2) of the hearing-impaired married individuals in Isinya, Kajiado County Kenya, had high level of marital satisfaction. This outcome pointed that the hearing-impaired married individuals may be struggling in their marriage, and this requires a critical attention on this population of the hearing impaired in

marital relationship. The finding suggests that communication barriers, social isolation, and possibly unmet emotional or practical needs are contributing to marital dissatisfaction. Addressing this issue would require a multifaceted, psychologically and culturally sensitive intervention to support both the individuals with hearing impairment and their partners.

4.6 Association between Hearing Impairment and Marital Satisfaction among Hearing Impaired Married Individuals in Isinya, Kajiado, Kenya

The third objective of this study was to establish the association between hearing impairment and marital satisfaction among hearing-impaired married individuals in Isinya, Kajiado, Kenya. To achieve this, the Pearson product-moment correlation coefficient was used to analyze the relationship between the two variables. The results are presented in Table 7 below:

Table 7: Association between Hearing Impairment and Marital Satisfaction

		Hearing Impairment	Marital Satisfaction
Hearing Impairment	Pearson Correlation	1	-.015
	Sig. (2-tailed)		.045
	N	160	160
Marital Satisfaction	Pearson Correlation	-.015	1
	Sig. (2-tailed)	.045	
	N	160	160

The Pearson correlation coefficient analysis in Table 7 shows a negative correlation ($r = -0.015$, $p = 0.045$) between hearing impairment and marital satisfaction among hearing-impaired married individuals in Isinya, Kajiado County. This finding suggests an inverse relationship, meaning that as the severity of hearing impairment increases, marital satisfaction decreases.

4.7 Relationship between Hearing Impairment and Demographics Characteristics among Hearing Impaired Married Individuals in Isinya, Kajiado, Kenya

Further analysis of socio-demographic characteristics revealed key insights into how different groups were affected by hearing impairment and marital satisfaction. The Pearson product moment correlation was used to conduct analysis on the relationship between hearing impairment and demographics characteristics of age and gender. The findings are tabulated in Table 8 below.

Table 8 : Relationship between Hearing Impairment and Demographics Characteristics

		Hearing Impairment	Age
Hearing Impairment	Pearson Correlation	1	-.036
	Sig. (2-tailed)		.652
	N	160	160
Age	Pearson Correlation	-.036	1
	Sig. (2-tailed)	.652	
	N	160	160

		Hearing Impairment	Gender
Hearing Impairment	Pearson Correlation	1	-.005
	Sig. (2-tailed)		.945
	N	160	160
Gender	Pearson Correlation	-.005	1
	Sig. (2-tailed)	.945	
	N	160	160

The Pearson correlation coefficient analysis in table 8, indicated that there was a negative relationship ($r = -.036$, $p = .652 \geq 0.05$) between hearing impairment and age among hearing impaired married individuals in Isinya, Kajiado, Kenya. Older married individuals (above 40 years of age) experienced higher levels of marital dissatisfaction compared to younger married individuals, possibly due to long-term communication struggles and challenges which contributes to relationship strain and emotional disconnect.

Also, findings revealed that there was negative relationship ($r = -.005$, $p = .945 \geq 0.05$) between hearing impairment and gender among hearing impaired married individuals in Isinya, Kajiado, Kenya. The analysis indicated that women reported lower marital satisfaction compared to men, especially in cases where communication barriers were more pronounced.

The Pearson Chi-square analysis was carried out to determine the relationship between hearing impairment and level of education among hearing impaired married individuals in Isinya, Kajiado, Kenya

Case Processing Summary						
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Hearing Impairment * Level Education	160	100.0%	0	0.0%	160	100.0%

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	201.841 ^a	132	.000
Likelihood Ratio	131.201	132	.503
Linear-by-Linear Association	.208	1	.648
N of Valid Cases	160		

a. 168 cells (98.8%) have expected count less than 5. The minimum expected count is .01

The Pearson Chi-square analysis indicated that there was significance relationship (Chi-square value = 201.841, $df = 132$, $p\text{-value} = .000 \leq 0.05$) between hearing impairment and level of education among hearing impaired married individuals in Isinya, Kajiado, Kenya. The hearing impaired married individuals with higher levels of education demonstrated slightly better marital satisfaction, likely due to increased awareness and use of assistive communication strategies.

4.8 Relationship between marital satisfactions and Demographics Characteristics among Hearing Impaired Married Individuals in Isinya, Kajiado County, Kenya

The Pearson product moment correlation was used to conduct analysis on the relationship between marital satisfactions and demographics characteristics of age and gender. The outcomes are shown in Table 9.

Table 9: Relationship between marital satisfactions and Demographics Characteristics

		Marital satisfactions	Age
Marital satisfactions	Pearson Correlation	1	.144
	Sig. (2-tailed)		.040
	N	160	160
Age	Pearson Correlation	.144	1
	Sig. (2-tailed)	.040	
	N	160	160

		Marital satisfactions	Gender
Marital satisfactions	Pearson Correlation	1	.118
	Sig. (2-tailed)		.137
	N	160	160
Gender	Pearson Correlation	.118	1
	Sig. (2-tailed)	.137	
	N	160	160

As seen in Table 9, the Pearson product moment correlation coefficient analysis revealed that there was weak positive relationship ($r = .144$, $p = .040 \leq 0.05$) between marital satisfactions and age among hearing impaired married individuals in Isinya, Kajiado, Kenya. This is an indication of direct relationship between two variables. This implied that it is possible that the higher married individuals advance in age, the more they find satisfaction in their marriage.

In addition, there was a weak positive and insignificant relationship ($r = .118$, $p = .137 \leq 0.05$) between marital satisfactions and gender among hearing impaired married individuals in Isinya, Kajiado, Kenya. The Pearson Chi-square analysis was carried out to determine the

relationship between marital satisfaction and level of education among hearing impaired married individuals in Isinya, Kajiado, Kenya.

Case Processing Summary						
	Cases				Total	
	Valid		Missing		N	Percent
	N	Percent	N	Percent	N	Percent
Marital satisfaction *	160	100.0%	0	0.0%	160	100.0%
Level Education						

Chi-Square Tests			
	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	315.942 ^a	124	.000
Likelihood Ratio	145.924	124	.087
Linear-by-Linear Association	.737	1	.390
N of Valid Cases	160		

a. 157 cells (98.1%) have expected count less than 5. The minimum expected count is .01.

The Pearson Chi-square analysis demonstrated that there was significance relationship (Chi-Square value = 315.942, df = 124, $p = .000 \leq 0.05$) between marital satisfaction and level of education among hearing impaired married individuals in Isinya, Kajiado, Kenya. This outcome is an indicative of a direct relationship between two variables; the higher the education, the more married individuals are satisfied with their marriage life.

4.9 Chapter Summary

This chapter gave the findings of the study. It presented the response rates of the questionnaires. It also showed the demographic characteristics of the study participants, then ended with the findings of the study in relation to the objectives of the study. The next chapter gives the discussions of findings.

CHAPTER FIVE

DISCUSSION

5.1 Introduction

This chapter discusses the findings of the study. The discussions are carried in connection to the objectives of this study, which focused on; the levels of hearing impairment among hearing impaired married individuals in Isinya Kajiado, the levels of marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County Kenya, and association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado, Kenya.

5.2 Levels of Hearing Impairment among Hearing Impaired Married Individuals in Isinya, Kajiado, Kenya

The first objective of this study was to assess the levels of hearing impairment among hearing impaired married individuals in Isinya, Kajiado, Kenya. Findings showed that 57.5% (n = 92) of the hearing-impaired married individuals had significant hearing impairment. The findings of this study corroborated the study of Dillard et al. (2022), which investigated the prevalence of self-reported hearing loss and associated risk factors. Based on the report of the finding, the prevalence of self-reported hearing loss was high among the participants of the study, which was at 26.8%. However, this percentage is lower than that of the current study. The finding of this study also confirms the study by Ramage (2019) in Canada. It was revealed that 19% of adults (4.6 million) had at minimum mild level of hearing impairment, and that an even higher percentage of adults' populace of 35% (8.4 million) had severe level of hearing impairment.

Further, the finding of this present study is similar with the study carried out by Kasebusha (2021) in Zambia. The results of the study showed that the participants of the study were at

moderate level of hearing impairment (25.0%), and this significantly interfered with their personal and social life engagements. This present study also confirms the study by the Uganda National Association of the Deaf (UNAD, 2021), and it was reported that 95% of the grownups (inclusive of the married couples) are living with a high level of hearing impairment (Batte et al., 2023). Similar findings were established in Kenya. Kilonzo (2022) in his study found that the percentage of participants with no hearing impairment was 49.3% (this study did not include participants with no hearing impairment), those with moderate hearing impairment were 47.9% and 2.7% had severe hearing impairment (which is lower in comparison to the finding of the current study).

Elder (2015) states that hearing links a person to the social as well as physical surroundings, and lack of hearing or a little of hearing can be holistically disturbing and challenging to live with. It is possible that this challenge among the hearing-impaired married individuals may be interfering with their daily life; that could facilitate some degrees of discomforts about life. West (2021) affirms this by submitting that hearing impairment reduces quality of life among hearing impaired married people, such that some of hearing-impaired married individuals find life meaningless and hopeless. In addition, Bull et al. (2020) further echo that the hearing-impaired couples face difficulties and challenges not just with one another but also with social segregation in various levels of day-to-day contacts with other people, which result in negative health results.

Hearing impairment could be seen as a serious threat not only to marital life, but also life in general. It is essential that keen psychological attention may be given to the hearing-impaired married individuals, as this may help facilitate good emotional management.

5.3 Levels of Marital Satisfaction among Hearing Impaired Married Individuals in Isinya, Kajiado County, Kenya

The second objective of this study was to measure the levels of marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County, Kenya. Findings demonstrated that a majority (n = 118, 73%) of the hearing-impaired married individuals in Isinya, Kajiado County Kenya, had a low score on marital satisfaction, while 5.6% (n = 2) of the hearing-impaired married individuals in Isinya, Kajiado County Kenya, had high level of marital satisfaction.

These findings confirm the findings of Morgan (2013) in the UK, which showed that 9% of the participants had low level of marital satisfaction with their hearing-impaired partner, while most participants (70%) revealed marital satisfaction with their overall relationships and their hearing-impaired partners. The participants of the study with the sense of satisfaction, had shown good compatibility and further reported marital satisfaction. The outcome of this study corroborated the findings of McCabe (2014) in the USA. The study found that 47% of the hearing-impaired married couples had low level of marital satisfaction; this low marital satisfaction manifested in several behavioral ways such that 3 out of 4 partakers (71.7%) reported being victims of emotional misbehaviors and more than half (56.5%) were victims of physical violence in marriage.

Th findings of the current study pointed that some of the hearing-impaired married individuals could be having a fulfilling marital relationship, while the others are yet to meet the need for marital satisfaction in their marital relationship. The low score of marital satisfaction among the hearing-impaired married individuals underscore the possibility that they are not happy in their marriage. Marital satisfaction implies a couple's subjective feeling of contentment in conjugal relationship. It is a state where married men and women experience stability and happiness in their marriages (Tavakol et al., 2017).

Further, it is likely that the hearing-impaired married individuals are confronted with several difficulties that may be negatively impinging in their lives. Soltani (2015) posits that marriage requires a meaningful relationship, therefore hearing impairment and other socio-environmental factors can have debilitating consequences for hearing impaired partners. This was further amplified by Lehane (2017) who argued that hearing loss could have a detrimental effect on marital satisfaction of couples. It is important that the hearing-impaired individuals' device ways of enhancing satisfaction in their marital life.

5.4 Association between Hearing Impairment and Marital Satisfaction among Hearing Impaired Married Individuals in Isinya, Kajiado, Kenya

The third objective of this study was to establish the association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado, Kenya. The outcome of the study revealed that there was negative relationship ($r = .015$, $p = .854 \geq 0.05$) between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado, Kenya. This demonstrates that an increase in hearing impairment leads to a decrease in marital satisfaction among the hearing-impaired married individuals.

The findings of the current study contradict that of Girma (2021) in Ethiopia, whose study established that marital satisfaction and stability with hearing impairment were significantly and positively correlated among married individuals ($r = .68$, $\alpha < .001$). Women's' marital satisfaction and stability were strongly and significantly correlated in spite of their hearing impairment $p = .74$, $\alpha < .001$, while this present study found negative correlation between hearing impairment and marital satisfaction among hearing impaired married individuals.

It is evident in the current study that the hearing-impaired married individuals who participated in this study had both significant hearing impairment and low level of marital

satisfaction. Marriage is a commitment that requires patience and consistent effort from the spouses. Hearing impairment may be seen as one of the major challenges among the hearing-impaired couples, coupled with the likelihood of environmental and socio-economic factors. It is possible that when biological challenge becomes severe and unbearable for partners, it could impinge negatively on their mood, which if not well managed, may lead to feelings of discontentment and dissatisfaction about marriage and other aspects of life endeavors.

According to Kvam et al. (2007), people with hearing impairment have been found to experience not only matrimonial issues but also socio-economic problems, like discrimination, denied opportunities, being ignored, and stigmatization in different human societies. These negative energies lower marital satisfaction among the hearing-impaired married people. Abedi et al. (2018) similarly assert that the challenge of hearing impairment threatens conjugal relationship, and this may result to lesser emotional connection intimacy, while Soltani (2015) added that hearing impairment shakes the foundation of marriage. Thus, a happy relationship is essential to matrimonial union as it deepens partners' commitment, and without harmonious relationship, marriage among the hearing-impaired individuals would be in jeopardy.

5.5 Chapter Summary

This chapter discussed the findings of the study. The discussions were carried in relation to the respective objectives of this study, which were: The levels of hearing impairment among hearing impaired married individuals in Isinya Kajiado, the levels of marital satisfaction among hearing impaired married individuals in Isinya, Kajiado County Kenya, and association between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado, Kenya. In the next chapter, the researcher focuses on the summary, conclusions and recommendations respectively.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter presents a summary of the key findings, provides conclusions drawn from the study, and offers recommendations for various stakeholders. Additionally, it suggests areas for future research to build upon the study's findings.

6.2 Summary of findings

This study examined the association between hearing impairment and marital satisfaction among hearing-impaired married individuals in Isinya, Kajiado County, Kenya. The study achieved a high response rate of 96.3%, indicating strong participation from the targeted population.

In regards to age distribution, a majority of the respondents (43.1%, $n = 69$) were between 28-33 years old, while only 1.9% ($n = 3$) were in the 46-51-year age group, suggesting that younger individuals were more represented in the study. Additionally, more women (55.6%, $n = 89$) participated in the study compared to men (44.4%, $n = 71$), indicating a higher response rate from females. The majority (43.8%, $n = 70$) of participants had certificate-level education, while 26.3% ($n = 41$) held a Bachelor's degree, showing that hearing-impaired individuals had diverse educational backgrounds.

Objective 1: Levels of Hearing Impairment

The study found that (57.5%, $n = 92$) of hearing-impaired married individuals had significant hearing impairment. 42.5% ($n = 68$) had mild to moderate hearing impairment. The study did not include people with hearing impairment.

Objective 2: Levels of Marital Satisfaction

The study deduced that a large proportion (73%, $n = 118$) of hearing-impaired married individuals reported low marital satisfaction. 21.4% ($n = 40$) had moderate marital

satisfaction. Only 5.6% ($n = 2$) reported high marital satisfaction, indicating that marital dissatisfaction is prevalent among hearing-impaired married individuals. The findings also showed gender differences, where females reported lower marital satisfaction than males. Additionally, older couples (above 40 years) experienced more marital dissatisfaction compared to younger couples. Longer durations of marriage (over 10 years) also correlated with lower satisfaction, suggesting that prolonged communication struggles contribute to relationship strain.

Objective 3: Association Between Hearing Impairment and Marital Satisfaction

The Pearson correlation analysis showed a negative correlation between hearing impairment and marital satisfaction ($r = -0.015$, $p = 0.045$), implying that as hearing impairment increases, marital satisfaction decreases. Age and marital satisfaction had a weak positive correlation ($r = 0.144$, $p = 0.040$), suggesting that older couples may experience slightly better coping mechanisms over time.

There was no significant relationship between gender and marital satisfaction ($r = 0.118$, $p = 0.137$), indicating that both men and women experience similar challenges in marriage despite reported lower satisfaction among females. A significant relationship was found between education level and both hearing impairment ($p = 0.000$) and marital satisfaction ($p = 0.000$), showing that higher education levels may contribute to better coping strategies in marriage.

These findings therefore postulate that interventions focusing on communication support, relationship counseling, and psychoeducation could improve marital satisfaction among hearing-impaired couples.

6.3 Conclusion

This study established that hearing impairment negatively affects marital satisfaction among hearing-impaired married individuals in Isinya, Kajiado County, Kenya. The study

concluded that there was a negative relationship ($r = -.015$, $p = .854 \geq 0.05$) between hearing impairment and marital satisfaction among hearing impaired married individuals in Isinya, Kajiado, Kenya. The findings indicate that higher levels of hearing impairment correlate with lower marital satisfaction, emphasizing the communication challenges and emotional strain that hearing-impaired couples face, hence hearing impairment comes with its challenge, such that it may interfere with the holistic functioning of a person who is living with hearing impairment.

Additionally, socio-demographic factors such as age, gender, education level, and duration of marriage influence marital satisfaction. Women and older couples reported more dissatisfaction, and higher education levels were associated with better marital satisfaction, possibly due to increased awareness and coping strategies. In as much as hearing impairment affect the individual at personal level, it also contributes to low marital satisfaction among hearing impaired married individuals.

This calls for policymakers and marriage counselors to support in developing strategies that will enhance communication, emotional bonding, and conflict resolution to improve marital satisfaction within this population. Imperatively, the hearing-impaired married individuals should device ways of mitigating their low marital satisfaction so as to edify their love relationship and thereby find more meaning in their marriage.

6.4 Recommendation

Based on the findings of this study, several recommendations are made to enhance marital satisfaction

For Hearing-Impaired Married Individuals

Hearing-impaired couples should actively communicate their struggles and seek psychological and emotional support, particularly those with significant hearing loss and low marital satisfaction. Couples may consider using assistive communication tools (e.g., sign

language interpreters, hearing aids, or written communication) to improve relationship interactions.

For Associations of the Hearing-Impaired

Hearing-impaired organizations should organize workshops on marriage enrichment, communication strategies, and coping mechanisms for hearing-impaired couples. These associations should advocate for government and private sector support in providing subsidized hearing aids, therapy sessions, and sign language training for married individuals.

For Counselling Psychologists and Marriage Counsellors

Counselling psychologists should be trained in Kenya Sign Language (KSL) to offer culturally and linguistically appropriate therapy for hearing-impaired couples. Family and marriage counsellors should create psychoeducational programs that focus on relationship strengthening, conflict resolution, and emotional support for hearing-impaired married individuals.

6.5 Recommendations for future study

Based on the study's findings, the following areas are recommended for future research:

1. A comparative study conducted to compare hearing-impaired men and women to assess how gender differences impact marital satisfaction.
2. An in-depth qualitative study conducted to explore the lived experiences, coping mechanisms, and specific challenges that contribute to low marital satisfaction among hearing-impaired married individuals.
3. An intervention-based research study carried out on the effectiveness of relationship counselling programs tailored for hearing-impaired couples to assess whether such interventions improve marital satisfaction.

4. A longitudinal study research tracking changes in marital satisfaction over time among hearing-impaired couples to determine long-term trends and factors influencing relationship stability.

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APPENDICES

Appendix A: Letter of introduction

Tangaza University College

Nairobi, Kenya

March 24, 2024

Dear participant,

Greetings, I am a master's degree student, taking Counselling Psychology at Tangaza University College, Nairobi, Kenya. Tangaza is a constituent college of the Catholic University of Eastern Africa in Nairobi. I am conducting a research investigating the association between hearing impairment and marital satisfaction among hearing impaired spouses in Isinya Sub County, Kenya. This study is undertaken in partial fulfilment of a degree in Masters of Arts in Counselling Psychology.

I am respectfully inviting you to partake in this research by answering to a series of questions. This activity will take about 1 hour 30 minutes. The questions will be signed for you and upon understanding you answer. Participation in this research is voluntary and there are no monetary rewards. Every information given will be strictly confidential. Your identity will not be disclosed. Withdrawal from participation at any given time is allowed without any repercussion Thank you.

Yours sincerely,

Catherine Mailu.

Appendix B: Authorization Letter



**OFFICE OF THE PRESIDENT
MINISTRY OF INTERIOR AND CO-ORDINATION OF NATIONAL GOVERNMENT
COUNTY COMMISSIONER, KAJIADO**

Telephone: 0203570295
Fax: 0202064416
Email: kajiadocc2012@gmail.com
When replying please quote

County Commissioner,
Kajiado County,
P.O. Box 1-01100
KAJIADO.

Ref. KJD/CC/ADM/45 VOL V (21)

23RD September, 2024

Catherine Munini Mailu
Tangaza University College,
P.O Box 15055-00509
NAIROBI

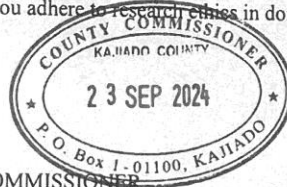
RE: RESEARCH AUTHORIZATION-MS CATHERINE MUNINI MAILU

Following the request made on your behalf by National Commission for Science, Technology and Innovation vide letter Ref. No. NACOSTI/P/24/37356 dated 4TH July 2024.

You are hereby granted authority to carry out research on "*Association Between Hearing Impairment and Marital Satisfaction Among Hearing Impaired Married Individuals in Isinya Sub-County, Kajiado County, Kenya*" for the period ending 4th July 2025.

It is expected that you adhere to research ethics in doing your study.

FAITH LUDEKI
FOR: COUNTY COMMISSIONER
KAJIADO COUNTY.



CC:

Deputy County Commissioner
ISINYA SUB-COUNTY

County Director of Education
KAJIADO COUNTY

County Director of Health
KAJIADO COUNTY GOVERNMENT

Appendix C: Informed Consent

Association between Hearing Impairment and Marital Satisfaction among Hearing Impaired Married Individuals in Isinya Kajiado County, Kenya.

Statement to be signed by the research participants

I agree to participate in the research project by Catherine Mailu who has discussed the research project with me. I confirm that have received a copy of the questionnaire and read it. I have had the opportunity to ask questions about this research. The researcher used sign language to explain to me and fully understand this research's general purposes, risks, and methods.

- I fully understand that my participation is voluntary and no monetary benefit to me.
- I can withdraw my consent at any point or skip a question I feel uncomfortable responding to without explanation or negative consequences.
- The risks including any possible inconvenience, and discomfort as a consequence of my participation in the research project
- The steps that have been taken to minimize any possible risks
- What is expected and required of me to do
- I should contact for any complaints with the research or the conduct of the research
- Security and confidentiality of my personal information.

Sign of participant..... Date.....

APPENDIX D: Questionnaire for participants

Section 1: Demographic characteristics of participants

This research questionnaire has three sections specifically: Section 1 = Demographic characteristics of participants, section 2 = hearing impairment and section 3 = marital satisfaction. The results of this study will be used specifically for

S-1. Does your hearing difficulty make you use the phone less often than you'd like?	4	2	0
--	---	---	---

academic reason only. Every information you share will be kept confidential. Please respond to all questions given in all the sections.

Please tick the most suitable statements by placing a tick (✓) in the box.

1. Age: []

2. Level of education
 - Certificate
 - Diploma
 - BA.
 - MA
 - PhD.

3. Gender of participant
 - Male
 - Female

Section 2: Hearing impairment questionnaire.

The purpose of this scale is to identify the problems your hearing impairment may be causing you. In each number, please circle one option either Yes (4), Sometimes (2), or No (0). Do not skip a question. If you use a hearing aid, please answer the way you hear without your aid.

Yes Sometimes No

E-2. Does your hearing difficulty make you feel embarrassed or out of place when you are introduced to strangers?	4	2	0
S-3. Does your hearing difficulty make you avoid groups of people?	4	2	0
E-4. Does your hearing difficulty make you touchy?	4	2	0
E-5. Does your hearing difficulty make you feel frustrated or unhappy when talking to people of your family?	4	2	0
S-6. Does your hearing impairment cause any other difficulties when you go to a party or social meeting?	4	2	0
E-7. Does your hearing difficulty make you frustrated when talking to work mates?	4	2	0
S-8. Do you feel hearing difficulties when you go to the movies or the theater?	4	2	0
E-9. Do you feel harmed or down because of your hearing difficulty?	4	2	0
S-10. Does your hearing impairment cause difficulties when you visit friends, relatives or neighbors?	4	2	0
S-11. Does your hearing difficulty cause you problems to hear/understand work mates?	4	2	0
E-12. Does your hearing difficulty make you nervous?	4	2	0
S-13. Does your hearing difficulty make you visit friends; relatives or neighbors less often than you'd like to?	4	2	0
E-14. Does your hearing difficulty make you argue or fight with your family?	4	2	0
S-15. Does your hearing difficulty cause you trouble to watch TV or listen to the radio?	4	2	0
S-16. Does your hearing difficulty make you go out shopping less often than you'd like to?	4	2	0
E-17. Does your hearing difficulty make you annoyed or unhappy?	4	2	0
E-18. Does your hearing difficulty make you prefer to be alone?	4	2	0
S-19. Does your hearing difficulty make you want to talk less to the people in your family?	4	2	0
E-20. Do you think that your hearing difficulty reduces or limits your personal or social life somehow?	4	2	0
S-21. Does your hearing difficulty cause you trouble when you are in a restaurant with family or friends?	4	2	0
E-22. Does your hearing difficulty make you feel sad or depressed?	4	2	0
S-23. Does your hearing difficulty make you watch less TV or listen to the radio less often than you'd like to?	4	2	0
E-24. Does your hearing difficulty make you feel embarrassed or less comfortable when you talk to friends?	4	2	0
E-25. Does your hearing difficulty make you feel isolated or left aside within a group of people	4		0

Section 3: Couples' satisfaction questionnaire

1. Please rate your relationship's overall happiness, taking all factors into account.

Very Unhappy	Moderately Unhappy	Less Unhappy	Happy	Very Happy	Extremely Happy	Perfect
0	1	2	3	4	5	6

The majority of people experience conflict in their relationships. Please circle in the space provided below how much you and your partner generally agree or disagree with each item on

	Always concur	Nearly Always Concur	Sometimes disagree	Commonly Disagree	Almost Always Be In Conflict	To Never Agree
2. length of time together as couple	5	4	3	2	1	0
3. significant choices	5	4	3	2	1	0
4. Manifestations of love	5	4	3	2	1	0

the list.

5. How frequently do you believe that your relationship with your partner is generally going well?	5	4	3	2	1	0
6. How frequently do you regret entering this relationship?	0	1	2	3	4	5

	Not at all correct.	True to a degree	True to some extent	Mostly correct	Almost entirely correct	True to the letter
7. I still have a close relationship with my wife.	0	1	2	3	4	5
8. If I could start over, I would choose to wed (or live with/date) the same person.	0	1	2	3	4	5
9. Our connection is solid.	0	1	2	3	4	5
10. I occasionally ponder whether someone else is out there for me.	5	4	3	2	1	0
11. I'm content because of my relationship with my girlfriend.	0	1	2	3	4	5
12. My spouse and I get along well and are at ease with one other.	0	1	2	3	4	5
13. I find it impossible to picture ever breaking up with my boyfriend.	0	1	2	3	4	5
14. I feel comfortable confiding in my spouse about almost everything.	0	1	2	3	4	5
15. Recently, I've having second thoughts about our relationship.	5	4	3	2	1	0
16. My spouse is the ideal romantic companion in	0	1	2	3	4	5

my opinion.						
17. I genuinely feel that my spouse and I work as a team.	0	1	2	3	4	5
18. I can't think of anyone else who could bring me as much joy as my spouse does.	0	1	2	3	4	5

	In no way	A little	Somewhat	Mostly	Almost completely	Completely
19. How fulfilling is your partnership with your spouse?	0	1	2	3	4	5
20. Your partner's ability to fulfill your demands is how?	0	1	2	3	4	5
21. How far has your relationship lived up to your initial hopes?	0	1	2	3	4	5
22. How content are you with your relationship overall?	0	1	2	3	4	5

Appendix E: Scoring of Hearing Handicap Inventory for Adults (HHIA)

The HHIA was developed by Ventry and Weinstein (1982). It is a 25-item self-assessment scale composed of two dimensions (emotional and social/situational). It is designed to assess self-perceived hearing handicap in adults. It is a Likert scale of 0-4, where 0 = No, 2 = Sometimes, 4 = Yes. Lowest score = 0 and highest score = 100. Handicap Inventory for Adults scores range from 0-16 = No impairment, 18-42 = Mild-Moderate hearing impairment, 44+ = Significant hearing impairment.

Appendix F: Scoring of Couples Satisfaction scale(CSS)

The scale is divided into 3 parts; section C (items S1-S8) measures subjective evaluation of the relationship. Section D (items E1-E18) measure emotion regulation, and section E measure pattern of interaction among couples. Higher score indicates higher marital satisfaction, and lower scores show lower marital satisfaction. The scoring is kept continuous, and it ranges from low (0-49), moderate (50-89) and high (90-150) marital satisfaction.

APPENDIX G: Permission to use the Hearing Handicap Inventory for Adults (HHIA)

15-2- 2024

Dear Ventry and Weinstein,

I am a Master's degree student at Tangaza University College, Nairobi, Kenya. I am currently conducting a research proposal, and investigating the association between hearing impairment and marital satisfaction among hearing impaired spouses in Isinya Sub County, Kenya. I have come across your publication and have noticed that your THI will contribute profoundly to my research. Due to this, I wish to seek your permission to use your scale (THI) in my study. I strongly thank for your contribution in the field of Psychology.

Sincerely,

Catherine Mailu

APPENDIX H: Permission to use couples' satisfaction scale

15-2- 2023

Dear Fincham and Bradbury (1987),

I am a Master's degree student at Tangaza University College, Nairobi. Tangaza University College is a constituent College of the Catholic University of Eastern Africa, Nairobi- Kenya. I am conducting a research proposal; investigating the association between hearing impairment and marital satisfaction among hearing impaired spouses in Isinya Sub County, Kenya. This research Proposal is a requirement for the Degree of Master of Arts in Counseling Psychology. I got hold of your publication during my search online, and therefore noticed your couples' satisfaction scale. This will assist in realizing my research questions. Kindly permit me to use your scale. Thank you for your noble role in the field of Psychology.

Sincerely,

Catherine Mailu.

Appendix I: Plagiarism Report



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- 0 Missing Citation 0%
Matches that have quotation marks, but no in-text citation
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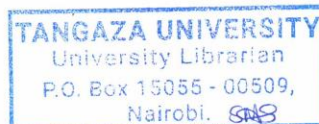
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Catherine Mailu

ASSOCIATION BETWEEN HEARING IMPAIRMENT AND MARITAL SATISFACTION AMONG HEARING IMPAIRED MARR...

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Tangaza University College

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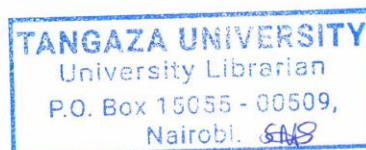
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Appendix J: Ethics Clearance -Tangaza University



TANGAZA UNIVERSITY COLLEGE

The Catholic University of Eastern Africa

11th June 2024

REF: DRIE/ISERC2024/01/0018

To: Catherine Mailu

Reg. No. 18/00671

Dear Catherine,

Re: "ASSOCIATION BETWEEN HEARING IMPAIRMENT AND MARITAL SATISFACTION AMONG HEARING IMPAIRED MARRIED INDIVIDUALS IN ISINYA KAJIADO COUNTY, KENYA".

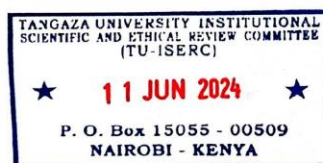
This is to inform you that TU-ISERC has reviewed and approved your above research proposal. Your application approval number is *TU-ISERC2024/01/0018*. The approval period is **11th June 2024 – 12th June 2025**. This approval is subject to compliance with the following requirements;

1. Only approved documents including (informed consents, study instruments, MTA) will be used
2. All changes including (amendments, deviations, and violations) are submitted for review and approval by TU-ISERC.
3. Death and life-threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to TU-ISERC within 72 hours of notification.
4. Any changes, anticipated or otherwise that may increase the risks or affected safety or welfare of study participants and others or affect the integrity of the research must be reported to TU-ISERC within 72 hours
5. Clearance for export of biological specimens must be obtained from relevant institutions.
6. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal.
7. Submission of an executive summary report within 90 days upon completion of the study to TU-ISERC.

Prior to commencing your study, you will be expected to obtain a research license from National Commission for Science, Technology and Innovation (NACOSTI) <https://research-portal.nacosti.go.ke> and also obtain other clearances needed.

Yours sincerely

Dr. Daniel M. Kitonga (Ph.D.)
Chair, TU - ISERC



Appendix K: Letter of Introduction-Tangaza University



TANGAZA UNIVERSITY COLLEGE

The Catholic University of Eastern Africa
DIRECTORATE OF RESEARCH, INNOVATION & EXTENSION
E-mail: dir.rie@tangaza.ac.ke Website: www.tangaza.ac.ke

OUR Ref: DRIE/ISERC2024/01/0018

Date: 11th June 2024

The Commission Secretary,
National Commission for Science, Technology and Innovation
P.O. Box 30623,
Nairobi – Kenya.

Dear Sir/Madam,

Re: Recommendation for Research Permit – Catherine Mailu

This is to confirm that **Catherine Mailu** is a PI in a researcher protocol which was submitted to TU-ISERC for review. The protocol was reviewed and approved for research permit.

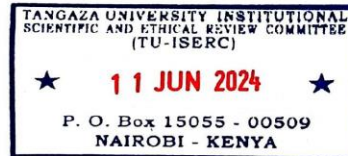
Catherine wishes to carry out research under the title "*ASSOCIATION BETWEEN HEARING IMPAIRMENT AND MARITAL SATISFACTION AMONG HEARING IMPAIRED MARRIED INDIVIDUALS IN ISINYA KAJIADO COUNTY, KENYA*".

I strongly recommend Catherine Mailu to the Kenya National Commission for Science, Technology and Innovation for issuance of a research permit. The permit will enable her to proceed to data collection for her study. Thanking you in advance for your cooperation.

Yours sincerely,

A handwritten signature in blue ink, appearing to be 'DK' with a flourish.

Dr. Daniel M. Kitonga (Ph.D.)
Director, Research, Innovation & Extension
Chairperson, TU-ISERC



Appendix K: NACOST RESEARCH LICENSE


REPUBLIC OF KENYA


**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY & INNOVATION**

Ref No: **643941** Date of Issue: **04/July/2024**

RESEARCH LICENSE



This is to Certify that Ms.. CATHERINE MUNINI MAILU of Tangaza University College, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Kajjido on the topic: ASSOCIATION BETWEEN HEARING IMPAIRMENT AND MARITAL SATISFACTION AMONG HEARING IMPAIRED MARRIED INDIVIDUALS IN ISINYA KAJIADO COUNTY, KENYA for the period ending : 04/July/2025.

License No: **NACOSTI/P/24/37356**

643941
Applicant Identification Number


Director General
**NATIONAL COMMISSION FOR
SCIENCE, TECHNOLOGY &
INNOVATION**

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See overleaf for conditions

Appendix L: NACOST RESEARCH LICENSE

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
 - i. Endanger national security
 - ii. Adversely affect the lives of Kenyans
 - iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
 - iv. Result in exploitation of intellectual property rights of communities in Kenya
 - v. Adversely affect the environment
 - vi. Adversely affect the rights of communities
 - vii. Endanger public safety and national cohesion
 - viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

National Commission for Science, Technology and
Innovation(NACOSTI),
Off Waiyaki Way, Upper Kabete,
P. O. Box 30623 - 00100 Nairobi, KENYA
Telephone: 020 4007000, 0713788787, 0735404245
E-mail: dg@nacosti.go.ke
Website: www.nacosti.go.ke