The Effect of Interpersonal Relations on Depressive Symptoms among Older Adults in Central Uganda

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Abstract: *Owing to the alarming prevalence of depression among older adults in Central Uganda and the ever changing family set-up (Musisi, 2015; MoLGSD, 2020), this paper examined the effect of interpersonal relations on depressive symptoms among older adults in Central Uganda. The study leveraged on the family environment Scale (FES) and Becks Depression inventory. As the number of persons over 60 years is expected to increase three folds by 2050 (UBOS, 2016; WHO, 2017; Rudnicka, et al, 2020), assessing the correlates of family interpersonal relations with depressive symptoms is important. This research adopted a sequential explanatory mixed-methods design (Kiyingi, 2022; Creswell & Zhang, 2009). A sample size of 292 older adults was considered. The statistical package for the social sciences (SPSS) was used to test the null hypothesis (There is no effect of interpersonal relations on depressive symptoms among older adults in Central Uganda.) and make data intelligible. Study results revealed a significant relationship (r = 0.352, p = 0.000) between interpersonal relations and depressive symptoms among older adults. Based on the Coefficient of Determination, interpersonal relation was found to contribute 12.4% to depressive symptoms among older adults in the study area. Based on the obtained p-value of 0.000, the null hypothesis was rejected. Conclusively, interventions like fostering social support systems, enhancing communication skills, and reducing relational stressors could be effective in reducing depressives symptoms among persons >60years. By addressing interpersonal dynamics, policymakers and practitioners can help to promote mental health and resilience amidst old age difficulties among older adults.*

Key words: *Interpersonal relations, Cohesion, Expressiveness, Conflict, Depressive Symptoms, Older adults,*

1. Introduction

Failing interpersonal relations in the family environment seem to be a growing concern (Aharimpisya, *et al.,* 2023; Musisi, 2015) while depressive symptoms are on increase among older adults. Liu *et al.*, (2017) urged attention of gerontologists on supportive remedies to interpersonal relations among other related concerns. In the recent past, the population of the greying citizens >60 years has increased by two folds. Approximately 1 in 6 persons will be over the age of 65 years 2050 (United Nations, 2019).

In Africa the number of old people is expected to triple to 165 millions. In Uganda the number of older adults is expected to surpass 6 millions by 2050 (MOLSD, 2020).

Considering the alarming prevalence of depressive symptoms among older adults in Central Uganda and the ever changing family set-up (Musisi, 2015; MoLGSD, 2020), this paper aimed at examining the effect of interpersonal relations on depressive symptoms among older adults in Central Uganda. The study leveraged on Moos' (1990) family environment Scale (FES) and Becks Depression inventory (Aaron Beck, 2019; DSM-V, 2013).

2. Literature Review

As people grow into their old age interdependency and reciprocity are highly valued than independence despite the changes and circumstances that have dispersed populations away from their traditional settlements (Schatz, *et al*., 2015 & MoLGSD, 2020). Works, rural-urban migration, death of children are some of the much causality to relocation and disappearance of the productive age groups. Often, out of economic necessity adult, children move to places distant from their original homes.

Gerontology scholars have increasingly voiced concerns about loneliness arising from the subjective perception of lack of meaningful interpersonal relationships within the reach of the older adults (Martin-Maria *et al*., 2021; Wandera, *et al*., 2015, Schatz, *et al*., 2017, Kim and Park., 2021). Additionally, families with cases of social isolation (neglect, missing generation, disengagements) among older adults require a second thought (Berg-Weger & Morley, 2020). Moreover, research in developing economies especially in Africa attest that older adults have dependents due to missing generation (Schatz, *et al*., 2015). Unfortunately, in most developing economies including Uganda, most older adults >60 years are not candidates to noncontributory pension (Musisi, 2015). Consequently, other challenges like food insecurity, financial support are very common especially when the relationship pattern do not work out well according to the basic African family setting.

Interpersonal relations and interpersonal satisfaction were cited by Gumikiriza-Onoria *et al*., (2023) and Kim & Park., (2021) as a determinant to mental health among older adults. Deriving satisfaction from social activities was contributory to physical health as well. This study encourages aging older adults to create avenues for interaction in community than solitude. Similarly, a study by Kinkade & Fuller, (2021) revealed that those participants who reported high levels of stress manifested fewer depressive symptoms especially when the derived high satisfaction from social ties and high frequency of community involvement. Kinkade & Fuller, (2021) suggested more research into community involvement for older adults to cope with stressing situations.

Earlier research by Liu *et al*., (2017) acknowledged the significance of family relationship on late life depression. In his study among Chinese older immigrants in the United States Liu *et al*., (2017) left research gap and urged attention on supportive remedies to interpersonal relations among other related concerns. This creates a need for a culturally applicable model that can be applied to address the wellness issues of the older adults in Central Uganda.

Many elderly lack bereavement support for the many tragic occurrences (Carr & Mooney, 2021). Common to the aging persons are personal irrational thoughts of no-longer carrying relevance to the community or family relations (Xu & Koszycki, 2020). These stressing illogical thoughts set in emotional distress and mental breakdown. In addition to that, depressive symptoms are said to be common with elderly whose problems are overlooked by immediate relatives and no or less efforts are taken to address their concerns (Kim and Park., 2021; Nawagi, *et al*., 2018; Mulat *et al*., 2021).

From the medical viewpoint, while treatment of aging conditions is unavailable in health care settings closets to most rural elderly, researchers Koenig *et al*., (2014) and Schulz *et al*., (2020) agreed that chronic disease burdens and economic dependencies render older adults lose self-worth and perpetuate mental health suffering especially in the face of heightened family wrangles. They assert that quality of relationships subsist most physical conditions at old age.

It is evident that the need for good family relations increases as individuals become of age or as family members become vulnerable (Musisi, 2015; Nakasujja *et al* 2021). In a study on family environment scale: resolving psychometric problems, Charalampous *et al*., (2013) studied the three dimensions of family environment (interpersonal relations, personal growth and system maintenance). Similarly, this study in Central Uganda takes interest in understanding the interpersonal relations component. It is important to know the degree at which people in a family are of concern to each other for example sharing and caring for each other, openness to discuss positive and negative feelings. In fact, the interdependence of members is very crucial as a family member grows old or become vulnerable as the family systems theory suggests (Becvar *et al*., 2023). Therefore, holism and unity depicts one unit of the family closely related to each other with concerns over everyone's well-being. The nature and intensity of such interpersonal relations was central to the earlier study by Moos, (1990) to conceptualize family environment. Therefore cohesion, expressiveness and conflict are very essential constructs maintained for this study among older adults in Central Uganda.

Interpersonal relations have been listed by Bae, (2020) as one of the factors related to depressive symptoms among older adults. He asserted that, conflict with the family members, friends and acquaintances were important scope to investigate interpersonal relations. Instances where togetherness is faulty, older adults are predicted to be affected mentally with depressive episodes. For instance,

a study by Vrshek-Schallhorn *et al.*, (2015) using person-month survival analysis consistently implicated chronic interpersonal stress and major interpersonal stressful life events (SLEs) as statistically unique predictors to the on-set of risk for major depressive episodes (MDE). This is in agreement with earlier research which revealed that loneliness among older adults was associated with more depressive symptoms and less togetherness compared to those that were not (Tiikkainen & Heikkinen, 2005). These studies imply that older adults who don't relate well with family members are at a higher risk of psycho-social challenges.

Togetherness has an extreme importance in the life of the aging persons (Holm *et al.*, 2013) basing on their lived experiences of conflicts in the family. Tough moments often are associated with episodes of not getting along with each other. Although togetherness depicted support and meaningful life (Holm *et al.*, 2013; Heu *et al.,* 2021), the component of living in common was not directly implied in these studies. These studies suggested that togetherness, getting along with each other and supportive family can be felt even when the family members were distance from the elderly. Significant cultural variation is evident from the African predisposition where in most cultures; living together is in reality not idealistic. People who live by themselves are perceived abnormal since loneliness has no place in the African family system. People communion with every family member, young and old.

Spending time with the elderly family members may imply solving loneliness (Vrshek-Schallhorn *et al.*, 2015), cultural social relations may be a breeding ground for loneliness. According to Heu *et al.,* (2021) culture influences how embedded individuals are in a social network, which relationships they receive and the essential social provisions that accompany such relationships (e.g., emotional support in friendships or partnerships). There are relationships that individuals deem important and others less important to their well-being. For emphasis, Heu *et al.,* (2021) asserted that love in partnerships; shared decision-making in the family are important parameters often quantified but less in-depth understanding of cultural meaning of loneliness based on the lived experiences of the older adults with their family. This study therefore intended to understand the interpersonal experiences of the older adults based on their cultural perspective in the selected districts in Central Uganda.

3. Methodology

3.1 Study Population
This research targeted 1218 households with older adults from 8 sub-counties taken from the four selected districts of Buganda region in Central Uganda. These Sub-counties are Kyesiiga, Buwunga in Masaka District, Nabigasa and Lwankoni in Kyotera District, Kkingo and Kisekka in Lwengo District, Kibinge, Butenga in Bukomansimbi District. The researcher selected these areas basing on the reports about suicidal thinking, depressed moods among other concerns by the CBO (Kitovu Mobile Organization) that works among older adults who are challenged by food insecurity, elderly persons with orphaned and vulnerable children under their care while other elderly persons do not have kinship care givers. It is evident that older adults in these areas are mostly affected by changes in family structures and depression than other places in Buganda region.

3.2 Study Design and Sample Size

Based on the recommendations by Creswell & Zhang, (2009), Simpson, (2015) about mental health research, this study used mixed methods approach. The study adopted a sequential explanatory mixed-methods design for comprehensive insights (Kiyingi, 2022; Creswell & Zhang, 2009). A sample size of 292 households with older adults was considered using the formula by Krejcie and Morgan (1970). According to Morgan's formulation, if the population of the study is 1218 then the representative sample size should be 292 respondents to the study. The Krejcie and Morgan's sample size calculation was based on p = 0.05 where the probability of committing type I error was less than 5 % or p *<0.05.*

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

Where;

n = required sample size.

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level *(0.05* = 3.841).

Np = the population size.

P = the population proportion (assumed to be 0.50 since this would provide the maximum sample size.

d = the degree of accuracy expressed as proportion (0.05).

The sample size was calculated as follows.

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

$$\frac{3.841 x 1218 x 0.5(1-0.5)}{0.05^2(1218-1)+3.841 x 0.5(1-0.5)}$$

$$\frac{1,169.5845}{3.042+0.96}$$

$$\frac{1,169.5845}{4.0025}$$

$n=292.21 \approx 292$

3.3 Sampling Procedures

The study in Central Uganda considered samples from a cross section of population considered competent in providing with vital information about the situation of older adults in greater Masaka area. Therefore, data was collected from older adults, medical workers, community development workers, spiritual leaders in the study area. The main respondents (older adults) were arrived at using simple random sampling, key informants (medical workers, community development workers, spiritual leaders) were sampled purposively and participants in the focused group discussions (care takers) were sampled using convenient sampling.

3.4 Research Instruments

As the number of persons over 60 years is expected to increase three folds by 2050 (UBOS, 2016; WHO, 2017; Rudnicka, *et al*, 2020), assessing the correlates of family interpersonal relations with depressive symptoms was important. To this end, the study leveraged on the family environment Scale (FES) and Becks Depression inventory. The 21 items of the inventory were found to give a comprehensive understating of the mental state of the community old persons compared to the geriatric depression scale (GDS) often used in health settings.

According to the depression DSM-V (2013) code derived from the International Classification of Diseases (ICD-10), depression is categorized on three levels; mild, moderate and severer with possibility of having recurrent depressive episodes.

3.5 Data Collection

This study in Central Uganda used both primary and secondary data collection methods. This is because of the perceived appropriateness to gather information about the phenomenon being studied. Questionnaire survey, interview, focused group discussion and documentary review methods were used.

Structured question items were used to elicit responses from respondents to the study (Welman, 2012). Bhattacherjee, (2012) and Welman, (2012) agree about the application of the questionnaire to cross-sectional field surveys, where the researcher has to collect data on the predictor and outcome variables at the same point in time (e.g., using a single questionnaire).

This method targeted 292 elderly respondents sampled using simple random technique. All the targeted respondents were interviewed at their households or other places of convenience (Kiyingi, 2022; Creswell, (2009). Due to the technicalities of the instrument, the principle investigator administered the questionnaire. Each interview lasted between 30 to 45 minutes in a language convent to the respondent (either Luganda or English).

Interview method in form of in-depth guided conversations were used (Yin, 2003; Creswell, 2009; Kiyingi, 2022). In reference to Table: 4, this study method purposively targeted 16 key informants (community development workers for the elderly, NGO workers, medical workers and spiritual leaders). This method was adopted due to the need to solicit views and opinions of people about their experience with older adults (Teddlie, & Tashakkori, 2009; Creswell, 2013). This underscores the need for an interdisciplinary approach to research.

3.6 Data Analysis

Simpson, (2015) and Mezmir, (2020) both agree that statistical representation of data is an important aspect of the study design. A clear data analysis plan for both quantitative and qualitative data was drawn to guide the study from the initial stages of summarizing, describing, and correlating of the data through to testing the hypotheses that guide this study on the effect of interpersonal relations and depressive symptoms among older adults in central Uganda.

The statistical package for the social sciences (SPSS) was used to test the null hypothesis (There is no effect of interpersonal relations on depressive symptoms among older adults in Central Uganda.) and make data intelligible. Descriptive statistics like frequencies, percentages, and means were used to measure the central tendency of the distribution of data based on the number crunching. Inferential statistics mainly using correlation analysis, regression and multiple regression were done using pearson product moment at 0.05 level of significance (Teddlie & Tashakkori 2009; Simpson, 2015). As guided by Creswell (2009), spiral approach to

qualitative data analysis, was applied to both thematic and content analysis techniques.

4. Results and Discussion

This section delves into making meaning of the field data from selected districts of Buganda region. Findings were analyzed using descriptive data and later advanced analysis procedures using linear and regression analysis to derive the cause effect relationship between the constructs. Results Table 1 presents likert means and percentages showing the level of agreement and disagreement means and variances in responses.

Table 1: Interpersonal Relations in Central Uganda

Items	SD		D		N		A		SA		x̄ Mean	Std. Deviation
	Fx	%	Fx	%	fx	%	fx	%	fx	%		
Cohesion												
I and family members have a feeling of togetherness.	89	30.5	73	25.0	2	0.7	83	28.4	45	15.4	2.73	1.52
I and family members get along well with each other and really back each other up.	85	29.1	82	28.1	0	0	53	18.2	72	24.7	2.81	1.61
I and family members have a plenty of time and attention for everyone.	57	19.5	104	35.6	4	1.4	36	12.3	91	31.2	3.00	1.59
Agg. Mean & SD											2.85	1.57
Expressiveness												
I and family members say anything we want around home.	82	28.1	79	27.1	3	1.0	50	17.1	78	26.7	2.87	1.62
I and family members tell each other about our personal problem.	83	28.4	72	24.7	0	0	80	27.4	57	19.5	2.85	1.56
Agg. Mean & SD											2.86	1.59
Conflict												
In our home, family members and I sometimes get so angry that we throw things at each other.	86	29.5	68	23.3	1	.3	54	18.5	83	28.4	2.93	1.65
My family is aware of my health	75	25.7	53	18.2	3	1.0	58	19.9	103	35.3	3.21	1.67
Agg. Mean & SD											**3.07**	**1.66**
Grand Mean & SD											**2.93**	**1.61**

n =292, *Source: Primary Data. Legend: Very high (4.24 – 5.00), High (3.43 – 4.23), Moderate (2.62 – 3.42), Low (1.81 – 2.61), Very Low (1.00 – 1.80)*

As seen in Table1, study findings reveal that interpersonal relations among older adults was moderate (x̄ = **2.93, SD = 1.61)** according to the scale used for this study in Central Uganda. This implies that many old persons live in a family environment where they do not have healthy interpersonal relationship with their relatives. These findings relate to Murray Bowen (1013-1990) family systems theory where he proposed that psychopathology does not reside in the individual, but rather in a disturbed system of family relations.

One of the respondent stated that; "*We are very much aware that old persons are physically weak and have to look upon the relatives as their source of strength. It would be wrong to expect much from them. Instated the older children and relatives should be responsible for their entire life. When they are not taken care of, the relatives are the ones to blame.*"(Participant #4, 2024)

Disturbed family relations to be moderate indicate the pathology. There is a need to support the entire family so as to enable their aging relatives to live happily. In the perspective of the FST, the functioning of the older adults based of the interactions in the micro-system being found minimal signals a desolate family environment at its core and the parent-child interaction, togetherness and support that Becvar *et al*., (2023) asserted remains minimal or an illusion in families with less interactions.

Cohesion

According to study results, cohesion was moderate (Agg. mean = **2.85, SD = 1.57)** among relatives of the older adults in the study area. Older adults did not feel a spirit

of solidarity and togetherness with the individuals in their families. Family harmony is yet very fundamental component towards achieving oneness and living in common.

Study findings reveal that a feeling of togetherness was moderate (mean = **2.92, sd = 1.52)** among older adults in Central Uganda. These findings are informative about the declining solidarity of family members in some families in the area where this study was conducted. Further analysis in Table 1 reveal that 89(30.5%) of the respondents strongly disagreed to having togetherness in their families while 73(25%) disagreed to the same statement. This implies that majority of the respondents did not have a feeling of living in togetherness with their family relatives. Such disjointed relationship does not promote mental wellbeing of older adults.

Questionable interpersonal relations were center concern for some respondents to the study. Although these relations suggested reflecting upon the current situation, such aspects of life also suggest faulty family relations in earlier years. One of the respondents informed that;

*"Older persons are less taken good care for by their relatives. Why would you see old persons staying alone in dilapidated structures as if they do not have any of their relative surviving? The relatives either do not relate with them well or older people did conduct themselves well while still in their early years."***(Key Informant #3, 2024***)*

These qualitative findings imply that togetherness in the family environment is lacking especially in crucial aspects. One would not ignore a relative challenged to meet the basic aspects of life. This is disturbing revelations about older adults in their family.

Table 1, reveal that getting along with each other and backing each other up was moderate (mean = **2.81, sd = 1.61)** with high deviation from the mean according to the scale used for the study in Central Uganda. This implies that family support to achieve life expectations is less realized in the lives of many older adults. Table 1 reveals that this challenge was recorded as a bother in the lives of 85(29.1%) respondents who strongly disagreed and 82(28.1%) who disagreed to getting along with each other in the family and backing each other up whenever there is need. Many 91(31.2%) respondents reported having plenty of time and attention for each other in the family. This research however found out that majority

104(35.6%) and 57(19.5%) of the respondents declined having plenty of time and attention for each other in the family.

Solidarity and support has dwindled in several families to the unprecedented levels of not caring after the weak family members who need to be support. In moments of need, family members are expected to hold onto each other for comfort and giving each other quality time. Human fulfillment is derived from oneness exhibited in the care and company. Some family members may consider instate to flight at the critical moments.

Qualitative findings revealed that some family members leave the suffering elderly by themselves especially if the researches are not enough to support their wellbeing. A participant stated that, *"Some older persons sell small items like tomatoes, sugarcanes sweet bananas from which they gain hope of making money and savings. This encouraged their relatives to re-turn home and take care of their aged relative. Some relatives run away from older adults who do not have means of survival."***(Key Informant #3, 2024***)*

These experiences depict how the family environment is lacking on cohesion among her members. Conditional relations in the family environment are not ideal and do not promote the mental wellbeing to the older persons. On the other hand, such experiences suggest the need for person to have solid income support as they grow into their later years. Income support can prove a better fallback position for the vulnerable older persons irrespective of assurance of family support and care.

Circumstances with lack of time for each other indicated social isolation of family members. Human beings are known to be social animals. Berg-Weger & Morley, (2020) and Wandera, *et al.*, (2015) were concerned about families with cases of social isolation among older adults that need to be given attention. Findings by Wandera *et al.*, (2015) were very informative about family members who neglect their older adults for several reasons. Older adults should not be just condemned despite the challenging and unpleasant life they might have led. Old age is the time when the old need the company of the young in many aspects. Open communication and companionship is very important for healthy aging.

Expressiveness

Findings in Central Uganda revealed that expressiveness was moderate (Agg. mean = **2.86, SD = 1.59)** among relatives of the older adults in the study area. These signify the lack of propensity for open communication among individuals that live with the greying population. Sharing is human and ought to be encouraged for better livelihood and elderly family care.

As evidenced in results Table 1, many 78(26.7 %) respondents and their family member say anything they want around their home. Majority 82(28.1%) and 79(27.1%) declined that in their family there wasn't an opportunity to talk about anything they wanted around the home. Talking is a therapeutic vent for pent up anger, worries and concerns older adults could be grappling with. Moments of sharing with family members would be very fundamental healing solutions if housemates would offer audience to the old. Such moments not only bridge the age gap between the old and the young generation, but also strengthen family relations and social ties.

Concerning open communication one of the respondents informed that,

> *"Some older adults have prayer groups. We encouraged them to meet in the home of the weakest person who is grounded at home. They are encouraged to prayer together and support the older person. During such moments they get a chance to share their challenges with group members and receive advices. Majority cannot get such opportunities at their home."*
> *(***Key Informant #3, 2024***)*

These findings are in agreement with Kinkade & Fuller, (2021) their research revealed that those participants who reported high levels of stress reported fewer depressive symptoms if they had high satisfaction with social ties. Certainly, older adults relate more with closer relatives than distant community members save for closer contemporaries. Additionally, Liu *et al*., (2017) accredited the effect of family relationship on late life depression. Older persons with weak family ties would face higher risk to depressive symptoms compared to those with strong family expressiveness and connections. Strong social connectedness may buffer potential depression.

Findings in Table 1, reveal that telling each other about personal problem was moderate (mean = 2.85, sd = 1.56) among respondents in Central Uganda. Some older adults in the study area did not have persons in their family to disclose personal problems. Table 1 indicates that many 80(27.4%) agree to have persons with who they open-up to their problems. However, majority 83(28.4%) and 72(24.7%) did not have a chance to talk about their personal problems with family members. Many older adults experienced life challenges like permanent loss of loved ones, property they would have been of support to them in their old age.

Findings from central Uganda are in agreement with Carr & Mooney, (2021) who noticed that many elderly lack bereavement support after tragic events. Moments of life

evaluation require persons to attend to them and offer consolation especially family members. Xu & Koszycki, (2020) have informed that in absence of a family member to offer comforter a feeling that they are no-longer relevant manifests leading to mental breakdowns.

Conflict

Study findings revealed that the state of conflict was moderate (Agg. mean **= 3.07, SD = 1.66**) among relatives of the older adults in the study area. Therefore there were moments when old persons experienced unpleasant disagreements, clashes among relatives and conflicting with some relatives. Such situations potentially hampered upon peace and mental stability of the old.

Results Table 1, reveal moderate score (mean = 2.93, sd = 1.65) on the fact that household members sometimes got so angry to the extent of throwing things at each other. These moments of out bursts are recoded in many 83(28.4%) respondents. It is not healthy that persons get angry to the point of throwing things to each other especially for the case of old citizenry. Such bigger family divides do not promote physical health and mental health of the older adults but rather exacerbate chronic conditions and mental breakdowns.

Family misunderstandings are unfortunately risky aging experiences. Such moments were reported by several key informants. A medical worker reported that, "*There could be gradual failing relationship between their relatives with the older person. Local leaders inform about their relatives but they are not certain why all their relatives decided to abandon them. Some older persons segregate to whom they would prefer to tell their suffering. This reduces the care from their family. (***Participant #4, 2024***)*

In the event that disunity may bleed into unhealthy relations and delayed management of health complications that entangle the elderlies, it is important that the family finds confidant persons to the old members. This could solve the scares the old may have together with the fears over the medical bills that often require the support from relatives. Family environment should be disinfected of threats to the health and psychological disturbances that may compromise the later life of the older adults.

Given that many older adults are economically dependents, findings from Central Uganda agree with earlier researchers Koenig *et al*., (2014) and Schulz *et al*., (2020) who realized that treatment for chronic conditions can easily be compromised especially in the face of family wrangles.

Results Table 1, reveal moderate score (mean = 3.21, sd = 1.67) on their family not being aware of their health

situation. This implies that older adults either don't want to share with family members or do not have persons to talk to about their health concerns. Results further revealed that many 75 (25.7%) and 53(18.2%) older adults have conditions not known to their family relatives. This is risky and can cause skipping medical schedule, like missing hospital visits and not taking medication in time. In some instances health conditions go unattended to.

Level of Depression

Family conflicts ought to be watched against by the care takers of persons in their old age. The elder persons are sensitive to information that could be offensive with potential cause conflicts in the family. Where conflicts in the family protrude in the face of the older adults, such moments trigger depression.

Table 2: Descriptive Statistics of Depression

Level of Depressive Symptoms	*Fx*	*%*
Normal	14	4.8
Mild Mood Disturbance	25	8.6
Borderline Clinical Depression	14	4.8
Moderate Depression	74	25.3
Severe Depression	65	22.3
Extreme Depression	100	34.2

n =292, Source: Primary Data

As seen in Table 2, very few 14(4.8%) and 24(8.6%) had normal moods and mild variances basing on the scale used for this study. This implies that only 39 older adults out of 292 participants in this study did not need to attend to their moods since it is normal to feel that way. Further analysis reveal that majority 253(86.6%) of the respondents were found to have depressive symptoms. This implies that older adults in Central region are living in under challenging mental health conditions that require to the attended to. Most of the older persons were found

to have extreme depressive symptoms (34.2%) while others were diagnosed with severe depressive symptoms (22.3%) according to BDI used for the study in selected Districts in Central Uganda.

To be able to analyze the influence of interpersonal relations on depressive symptoms among older adults in Central Uganda, Pearson correlation product moment was done. This was found to be statistically effective to generate output. Findings are thus presented in table 3.

Table 2: Interpersonal Relations and Depressive Symptoms

Item	Description	Measure
System Maintenance	Pearson correlation(r)	0.352**
	P-Value	0.000
	Coefficient of Determination (r^2)	0.124

n =292

**Correlation is significant at the 0.05 level (2-tailed)*

As indicated in Table 3, there is a significant relationship between **(r = 0.352, p = 0.000)** interpersonal relations and depressive symptoms among older adults in Central Uganda**.** This implies that building quality of interpersonal relationship in a household or a family has an effect on depressive symptoms and mental wellbeing among old persons. Research findings using the Coefficient of Determination present that interpersonal relation contributes **12.4%** to depressive symptoms among older adults in the study area.

These findings are similar to qualitative responses from some key informants. A respondent stated that, "*They lament being abandoned by their relatives. Although neighbors and supportive persons may offer care, this is*

less compared to the care the relative will give to their older parent. Often neighbors remember to visit the older persons late in the evening. This condition stresses the older persons the most."**(Key Informant #3, 2024)**

Findings are indicative to the fact the older persons who relate well among their relatives receive good care and attention yet those who experience faulty relations with their family face several challenges. Gerontologist, community workers and care givers should ensure that relatives have cohesion, open communication and avoid conflicting amongst themselves.

Table 4: ANOVA Analysis of Interpersonal Relations and Depressive Symptoms

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	76.826	1	76.826	41.137	.000ᵃ
	Residual	541.595	290	1.868		
	Total	618.421	291			

a. Predictors: (Constant), Interpersonal Relation

b. Dependent Variable: Levels of Depression

The regression analysis demonstrates a statistically significant relationship between interpersonal relations and depressive symptoms, as indicated by the ANOVA results in Table 4. The model's F-statistic of 41.137 with a p-value of 0.000 shows that interpersonal relations significantly predict levels of depressive symptoms among older adults. The total variation in depressive symptoms (618.421) is partially explained by interpersonal relations, with 76.826 attributed to the predictor and the remaining 541.595 attributed to other unexplained factors. This highlights the importance of interpersonal relations in understanding depressive symptoms, although other factors may also play a role.

Table 5: Regression Analysis of Interpersonal relations and Depressive Symptoms

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.610	.184		30.424	.000
	Interpersonal Relation	-.060	.009	-.352	-6.414	.000

a. Dependent Variable: Levels of Depression, R Square 0.124; Adjusted R Square 0.121

The coefficients further clarify the nature of this relationship. Findings in table 5 reveal that the unstandardized coefficient (B=−0.060) indicates that for every unit increase in interpersonal relations (improvement in quality or supportiveness), depressive symptoms decrease by 0.060 units. The standardized coefficient (β=−0.352) suggests that interpersonal relations moderately affect depressive symptoms. Both the intercept and the interpersonal relations variable are highly significant (p<0.001p), underscoring the reliability of these findings. These results emphasize that fostering positive interpersonal interactions can be a crucial strategy in reducing depressive symptoms and improving mental health outcomes.

One of the key informant community workers emphasized the importance of restoring and building interpersonal relations in the family with their elderly relative. This was used as a vital strategy to restore harmony and ensure support to the older adult. He stated that,

"NGO workers make search and contact the relatives to the elderly to remind them about their primary responsibility of caring about their relative. When these persons regain knowledge about their responsibility they work with the support systems where possible to support the elderly." (**Key Informant #4, 2024**)

Building interpersonal relations in the family is a pillar to reduce depressive symptoms. Critical moments like traveling to hospitals, preparing meals, providing meals, security, hygiene and comfort among others require the support of other persons. Instrumental activities of daily living are therefore very important and can be fulfilled well if strong interpersonal relations are assured.

Hypothesis Testing

The hypothesis that "there is no effect of interpersonal relations on depressive symptoms among older adults in Central Uganda" was tested using regression analysis.

Results indicate a significant relationship between interpersonal relations and depressive symptoms. The unstandardized coefficient (B=−0.060) shows that for every unit increase in the quality of interpersonal relations, depressive symptoms decrease by 0.060 units. This negative association underscores the protective role of supportive interpersonal relations in mitigating depressive symptoms.

Additionally, the p-value of 0.000, which is well below the standard significance threshold of 0.05, provides strong evidence that this relationship is not due to chance. The F-statistic (41.137) further supports the model's overall significance and predictive power, emphasizing the importance of interpersonal relations as a key determinant of mental health outcomes among the study group.

Based on these findings, the null hypothesis was rejected, and it was concluded that interpersonal relations significantly affect depressive symptoms among older adults in Central Uganda. This relationship highlights the critical role of social interactions in shaping mental well-being, particularly for older adults who may rely heavily on the support of family members before social networks supplement. These results suggest that interventions aimed at improving interpersonal relations such as fostering social support systems, enhancing communication skills, and reducing relational stressors could be effective in reducing depressive symptoms among persons >60years of age. By addressing interpersonal dynamics, policymakers and practitioners can help promote mental health and resilience amidst old age difficulties among older adults in Central Uganda.

5. Conclusion and Recommendations

5.1 Conclusion

Poor family cohesion, neglect, and lack of meaningful interaction significantly correlated with heightened depressive symptoms. Family support systems played a pivotal role in reducing emotional distress.
Interpersonal relations, characterized by open communication, shared responsibilities, and emotional support, were shown to be vital for promoting mental health. Conversely, strained relationships, neglect, and familial conflicts amplified the risk of depressive symptoms. These findings emphasize that addressing interpersonal dynamics within families is not just a psychological or emotional necessity but a public health priority.

5.2 Recommendations

1. To the Ministry of labour gender and social development, community development workers and NGOs workers they should strengthen family cohesion and communication. This will encourage open communication and shared responsibilities among family members to foster emotional support and reduce isolation. Programs should focus on promoting harmonious family interactions to mitigate interpersonal conflicts.

2. The Ministry of labour gender and social development and ministry of Health (MoH) through the community development workers should liaise with other community workers in NGOs to implement Community-Based Counseling Programs. The establishment of community counseling initiatives that target family units, providing education on conflict resolution and emotional support strategies may enhance relationships within families.

3. The Ministry of labour gender and social development, NGOs and community development workers MUST support peer-led social groups to facilitate peer-support groups for older adults to provide alternative sources of companionship and shared understanding, especially in cases where familial support is insufficient.

Acknowledgement

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