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**EFFECTS OF SCHOOL CLUBS ON PSYCHOSOCIAL WELL-BEING OF  
SECONDARY SCHOOL GOING LEARNERS  
CASE STUDY: REFUGEE COMMUNITIES IN UGANDA.**

A dissertation presented to

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*Making a Difference*

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**Master's Dissertation**

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## Acronyms

°E	Degrees East
°N	Degrees North
CAPI	Computer Assisted Programmed Interviews
<i>CATREG</i>	Categorical Regression
CSMH	Complete State Model of Health
CV	Coefficient of variation
CVI	content validity index
ERPII	Education Response plan two
FGD	Focus Group Discussion
OECD	Organisation for Economic Cooperation and Development
PCA	Principal Component Analysis
PFA	Principal Factor Analysis
SPSS	Statistical Package for Social Scientists
<i>UNHCR</i>	United Nations High Commission for Refugees
WHO,	World Health Organisation

## Abstract

Whereas many school clubs have been established among schools in Uganda's refugee settlements over the years. There has been limited evidence on the effect of school clubs on Psychosocial well-being of refugee adolescents, particularly those in secondary school going age bracket in Uganda. *UNHCR (2022)* noted increasing trend of suicide cases the same age bracket. Existing studies are not specific to Uganda refugee setting, to prove whether there are significant differences in psychosocial well-being outcomes of refugee adolescents participating in school clubs and those that do not participate. Other studies mostly present qualitative evidence.

Qualitative and Quantitative data was collected from randomly sampled refugee secondary school learners in Bidibidi, Palorinya, Kyaka II and Rwamwanja Refugee settlements. Categorical Regression (CATREG) analysis using Optimal Scaling was used to explore the extent to which Psychosocial well-being is affected by school clubs. Specific objectives of the study were to: Find out degree to which school club parameters influence stress levels; self-esteem levels; Psychosocial resilience and combined psychosocial wellbeing parameters of secondary school students in refugee communities in Uganda.

Study investigates whether belonging to school clubs (*Average number of members involved in a club, Number of clubs a student is involved in, type of club which student belongs, length of time spent participating in school clubs*) significantly affect psychosocial wellbeing (stress levels, self-esteem and Psychosocial resilience) of refugee secondary school level students in Uganda.

Increasing participation in school club activities negatively affected levels of stress among refugee students. Overall, belonging to school club significantly determined level of stress among refugee students in ordinary secondary levels of education in Uganda. The type of club student belonged potentially had significant association with stress level ( $\beta = -1.129$ ,  $p = 0.006$ ). Similarly, the more the time spent participating in school club activities" significantly reduces stress ( $\beta = -0.108$ ,  $p = 0.035$ ). Number of members per club was negatively related to Self-Esteem of students ( $p = 0.047$ ). Students who were involved in more than one club had substantially higher levels of self-esteem ( $p = 0.018$ ). The number of clubs participated in, had significant positive association with their psychosocial resilience ( $p = 0.018$ ). The higher number of members per club had a negative impact on Psychosocial Resilience levels (beta = -0.553;  $p = 0.035$ ). There is need to Prioritize school clubs with appropriate student-to-club ratios and duration is crucial for enhancing psychosocial resilience and self-esteem among refugee students in secondary schools. Future research should explore the impact of active engagement in school clubs and include additional variables to improve predictive outcomes in similar contexts.

# CHAPTER ONE

## GENERAL INTRODUCTION

### 1.1 Introduction

This section presents an outline of the main items of the research proposal on the topic to examine the extent to which school club affects psychosocial wellbeing of secondary school students in refugee communities in Uganda. In this section, the study presents the background of the study, statement of the problem, objectives of the study, hypothesis, significance of the study, scope of the study, conceptual framework, and definition of key terms.

#### 1.1.1 Historical background

Extracurricular activities evolved between the 18<sup>th</sup> and 19<sup>th</sup> Century, their integration into school clubs became formidable with rich historical perspective varying globally (Beeks, Barbara A. 2023), showing unique developments in America (Fredricks, J. A., & Eccles, J. S. 2008), China (Tan, M., Cai, L., & Bodovski, K. 2022 & (Ying, Y. 2023) and Africa (Brown, R., & Evans, W. P. 2002). The integration of extracurricular activities into school clubs has therefore triggered research interest into their purpose, dynamics, impact, and knowledge gaps over time according to the Peabody Demonstration School, (1949).

In American black schools the evolution of school clubs and their extracurricular activities dates back, where significant investment was initially met between 1868 to 1940 (Neely, S. R., & Vaquera, E. 2017). Where the evolution of school clubs and interest in researching on the same has grown over the years, a wide knowledge gap has been noticed specifying how school club activities respond to psychosocial wellbeing of refugee students.

School clubs have roots in ancient Greece, where educational institutions focused on holistic development, including physical, intellectual, and moral aspects. During the Middle Ages, universities and schools formed societies and clubs to promote intellectual discourse through extracurricular activities (Philippides, & Hanak, 2011).

In the 19th century, as formal education expanded, clubs became more common in schools, fostering camaraderie and shared interests among students. Literacy and debating clubs gained prominence, emphasizing intellectual growth (Moyo, 2022). The 20th century saw a surge in specialized clubs, reflecting societal changes. Science clubs, arts and culture, and sports clubs became prevalent.

According to Juma (2019), In the mid-20th century, student activism led to the formation of social justice and political clubs, reflecting broader social movements while in the 21st century, climate change and advancement in sports science saw emphasis on environment and sports clubs. Subsequently the focus shifted towards inclusivity, with schools promoting a wide array of clubs to cater for diverse interests of student and peace promotion.

Greene (2016) &Juma (2019) stressed that in Africa, the colonial era introduced Western-style education, influencing the formation of school clubs. Missionary schools played a crucial role in establishing Christian-based clubs. While in Post-Colonial Era African nations developed their education systems, with school clubs reflecting local cultures. Clubs became platforms for preserving traditional arts, languages, and values.

Uganda's education system, influenced by British colonialism, incorporated extracurricular activities, including clubs. Missionary schools played a significant role in shaping the early club culture. In post-independence Uganda, efforts have been made to blend Western education with traditional values through clubs. Clubs focused on promoting civic engagement, cultural awareness, and skills development (Ministry of Education and Sports Uganda, 2020).

### **1.1.2 Theoretical perspectives**

The evolution of school clubs can be understood through various theoretical lenses that highlight the changing dynamics of education and societal needs.

According to Sociocultural theory by (Vygotsky, 1978) emphasizes “the role of social interaction and learning culture”. School clubs can be viewed as social spaces where students engage in shared activities, shaping their cognitive and social development. Humanistic theories by Maslow (1943) & Rogers, (1961), suggest that individuals seek personal fulfillment and self-actualization. School clubs, by providing platforms for self-expression

and exploration of interests, align with humanistic principles. From a structural-functional perspective, school clubs contribute to the overall functioning of the education system by promoting social integration, skill development, and the transmission of cultural values (Britannica, T. Editors of Encyclopaedia 2024). The constructivist approach emphasizes active learning and the construction of knowledge by individuals. School clubs, as extracurricular activities, allow students to actively engage with and construct knowledge outside the traditional classroom setting (Zajda, 2021).

### **1.1.3 Conceptual analysis**

According to Rahman (2021). School clubs are organised bodies that are served by an educational institution for the students who want to develop relationships anchored on common interests, goals, or activities and work together. There are morning clubs and afternoon clubs functioning under the wings of the school or college, normally directed, or sponsored by teachers or faculty members. The main objective of extracurricular school clubs is to complement the formal curriculum and give students a chance to participate in school activities, exercise their individual skills, interact socially with peers, and make new friends.

Examples of school clubs include extracurricular activities such as debate, science competitions, drama, music bands, sports, language training, environmental clubs, and various other groups that cater to diverse student interests (Rosch& Nelson 2018).

Participation in school clubs offers students a chance to explore their passions, develop leadership skills, build friendships, and contribute to the school community. These extracurricular activities often play a crucial role in shaping students' overall educational experience (Y. L. Chen et al., 2023)by providing a well-rounded and holistic approach to learning and personal growth and psychosocial wellbeing.

According to (Gao and McLellan, 2018)Psychosocial well-being is how individuals feel when they have evocative control to manage life. However, “Psychosocial well-being problems have become increasingly common among students nowadays, especially secondary students who are prone to Psychosocial problems” (Roslan et al., 2017)

Concept of Psychosocial wellbeing has been in discrepancy since its initiation. Morales-Rodríguez et al., (2020) reports that “some researchers have associated Psychosocial well-

being with the fulfillment of life potential and happiness and others have associated well-being with personal experience of individuals or with the result of accomplishing goals as well as the feeling the desire to participate in attractive activities”.

According to Literature, poor Psychosocial well-being is very important and critical for students changing academic environments from structured to unstructured setting (Stavraki et al., 2022). Therefore, Psychosocial wellbeing includes different domains related to self-acceptance, people to people connections, independence, adaptability, self-improvement and life purpose (Morales-Rodríguez et al., 2020) which critical for refugees.

According to (Chiumento et al.2022), “there are high needs for Mental Health and Psychosocial Support (MHPSS) amongst refugee communities in Uganda. Twenty-two (22) per cent of refugee households reported at least one member was in psychological distress or scared. Psychosocial functioning among children, associated with poor community child protection structures and issues such as mistreatment and neglect of (foster) children, early marriage, or teenage pregnancy”.

#### **1.1.4 Contextual perspective**

Over the past six decades, Uganda has been receiving refugee influx. of more than 1.5 million, according to United Nations High Commissioner for Refugees ([UNHCR, 2024](#)). Refugees, especially teenagers (13 to 17) tend to manifest huge psychosocial wellbeing challenges that suffice in their academic life as they struggle to enroll and stay in school. Over the years, school clubs have been introduced in most schools in refugee communities and assumed to have significant effect on student’s life.

According to UNHCR’s Child protection report (2022), an increasing trend of suicide cases had been noted in Uganda’s refugee adolescents of secondary school going age. Studies in other countries on similar subjects have shown that club activities tend to have significant influence on coping strategies, self-confidence and emotional intelligence among students in general though not specific to refugees (Fteiha&Awwad, 2020).

Despite the evolving history of school clubs in Uganda, noted are significant research gaps when it comes to disclosing clubs’ impact on refugee students' stress levels, self-esteem, and psychosocial resilience. Sufficient evidence is still needed to understand the truth in the

Ugandan refugee setting. So far, no study has been done in refugee settlements in Uganda, to prove the difference in psychosocial well-being of adolescent children when they participate in school club activities and those that do not participate.

## **1.2 Statement of the problem**

With the past hostile political environment faced by refugees in Uganda while in their country of origin, many report incidents of sexual and gender Based Violence (SGBV), abuse, suffering, detachment from family, inadequate basic needs and shortfalls in livelihoods opportunities. These situations affect the Mental wellness of refugee adolescent (13-17) compared to other age groups. The impact is usually indicated by extremely poor copying behaviors, such as alcoholism and drug abuse, hopelessness, stress leading to increasing rate of suicide among adolescents (UNHCR, 2019). According to the UNHCR (2023), a total of 97 cases of attempted suicide were filed in 2019 while in 2023 over 60 deaths attributed to suicide were reported .

Whereas Uganda has hosted refugees over the past six decades (Anacleto, 1996), significant donor funding has gone into activating extracurricular activities in school clubs according to Uganda's Education Response Plan two (ERPII, 2022). However, research efforts poised on investigating the linkage between extent of students' participation in different school club activities and their psychosocial effects remains unclear. This is premised on Uganda's refugee response, where many school clubs have been established in refugee settlements over the years. Noted is a wide but existing research gap characterised by limited exploration on how refugee context itself influences effectiveness of school club activities in promoting psychosocial well-being of teenage learners. Many studies rely on qualitative data and provide information under normal circumstances, missing the refugee context. In this study a robust analysis using quantitative methods helps to establish statistical relationships between participation of refugee students aged 13 to 17 years in school clubs and their subjective psychosocial outcomes. The study also draws Comparative analysis, showing how the school club parameters and extracurricular activities students involved in impact different psychosocial domains of refugee teenagers. The study took place among schools in refugee settlements in southwest and West Nile subregions.

### **1.2.1 Purpose of the study**

The study explores the magnitude to which participation in school club activities affects in psychosocial well-being of refugee teenagers (13 to 17 years) in secondary level of education. School clubs are organized groups within an educational institution that bring together students who share common interests, goals, or activities. The study uses mixed methods but mainly relies on quantitative approach. Though some qualitative data was used to explain some quantitative results.

The study relies on Categorical Regression (CATREG) models to determine whether school club parameters (Average number of members involved in a club, Number of clubs a student was involved in, type of club which a student belonged, and length of time spent participating in school clubs) individually or when combined, determined level psychosocial wellbeing (Psychosocial Resilience, Stress Levels and Self-esteem).

### **1.2.2 General objective**

The primary aim of the study was to assess the degree to which participating school club affects psychosocial wellbeing of secondary school students in refugee communities in Uganda.

### **1.2.3 Specific objectives**

Specifically, the study sought.

- 1) To find out whether school club parameters influence stress levels of secondary school students in refugee communities in Uganda.
- 2) To examine the extent to which school club parameters influence self-esteem levels of secondary school students in refugee communities in Uganda.
- 3) To establish the level of effect of school club parameters on resilience of secondary school students in refugee communities in Uganda

- 4) To explore how school club parameters affect combined psychosocial wellbeing parameters.

### **1.2.4 Research questions**

- 1 What school club parameters influence stress levels of secondary school students in refugee communities in Uganda?
- 2 What extent do school club parameters influence self-esteem levels of secondary school students in refugee communities in Uganda?
- 3 What are the effects of school club parameters on psychosocial resilience of secondary school students in refugee communities in Uganda?
- 4 How do school club parameters affect a combination of psychosocial wellbeing parameters of secondary school students in the refugee communities in Uganda?

### **1.2.5 Study Hypotheses**

- 1 **H<sub>0</sub>**: There is no significant relationship between School club parameters on stress levels of secondary school students in refugee communities in Uganda.
- 2 **H<sub>1</sub>**: There is no significant positive influence of School club parameters on self-esteem levels of secondary school students in refugee communities in Uganda.
- 3 **H<sub>2</sub>**: There is a negative effect of school club parameters on psychosocial resilience of secondary school students in refugee communities in Uganda.
- 4 **H<sub>3</sub>**: There is no significant effect School club parameters on a combination of psychosocial wellbeing parameters among secondary students in the refugee communities in Uganda.

### **1.3 Significance of the study**

This study is crucial for Ministry of Education and Sport, in the pursuit to enhance participation of refugee children in school clubs. Hence assisting them to be united and work with each other in achieving their goals. Due to significant and explicit donor funding that is directly channeled to support establishment and functioning of school clubs in refugee settlement, creates a need to deeply study this subject to understand whether school clubs are associated with psychosocial changes.

The study provides timely evidence on education situation in refugee settlement of Bidibidi, Palorinya, Rwamwanja and Kyaka II. This information can be used government of Uganda to strengthen education policies regarding by paying attention to the extra-circular activities in

refugee secondary schools in Uganda. Findings inform UNHCR and other organizations, the psychosocial challenges facing the refugee children in secondary school of refugee settlements in Uganda.

Evidence provided supports strategic planning for refugees. Teachers can also benefit from the findings since they tend to meet psychosocial challenges among students in their efforts to access education and what can help them to overcome the challenges.

Recommendation forms a basis for literature review and informs for future research in similar areas explored. It contributes to new knowledge linking to existing studies related to the same field focusing on school clubs and Psychosocial wellbeing of forcefully displaced students.

### **1.3.1 Justification of the study**

The justification for this study arises from the unique challenges faced by refugee adolescents in Uganda, particularly those aged 13-17, who experience heightened levels of stress, trauma, and poor coping behaviors such as alcoholism, drug abuse, and suicide. While Uganda has received significant donor funding to support extracurricular activities through school clubs aimed at improving psychosocial well-being, there is limited quantitative research on the effectiveness of belonging to school clubs and psychosocial. This study fills a critical gap by quantitatively assessing how participation in school clubs influences the psychosocial well-being of refugee teenagers in Uganda. This study uses predominantly quantitative study because most similar studies focused on qualitative. The Qualitative information used in this study explains convergency of the findings with quantitative results.

## **1.4 Scope of the study**

### **1.4.1 Content scope**

The study focused on school clubs and Psychosocial Well-being of refugee secondary school learners. The study paid attention to; average number of student members involved in a club, Number of clubs a student was involved in, type of club which student belonged, and length of time spent participating in school clubs. On the other hand, Psychosocial wellbeing parameters include stress levels, self-esteem, and psychosocial resilience.

### 1.4.2 Geographical scope

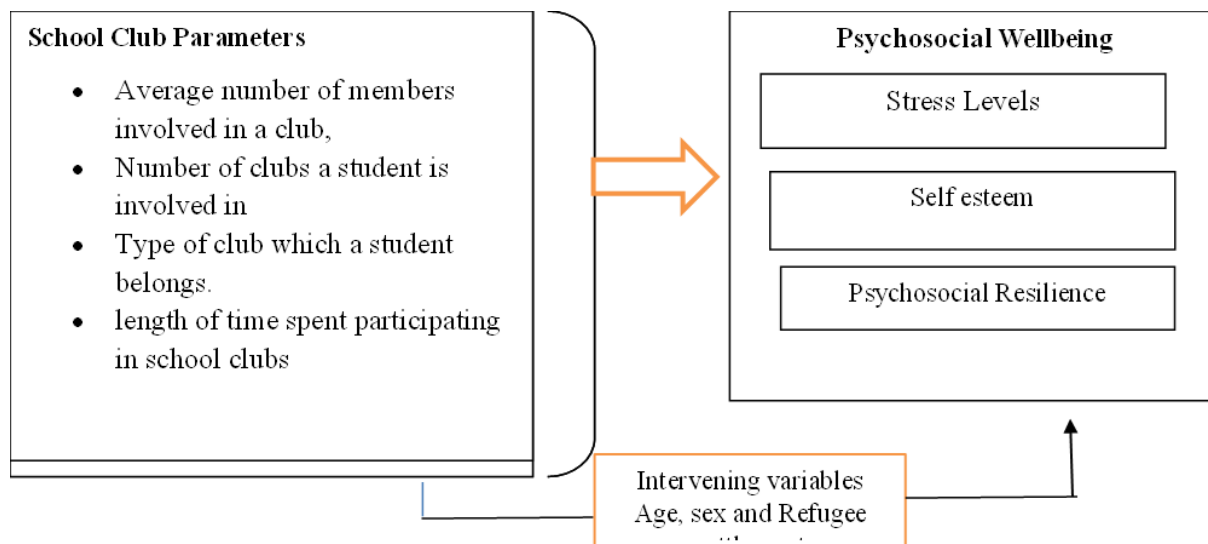
The study was conducted in secondary schools found in Bidibidi (3.53°N 31.35°E) and Palorinya (3.4774°N 31.6121°E) refugee settlements in Yumbe and Obongi districts respectively and located in West Nile sub-region in northwestern Uganda. Other study sites were Kyaka II (0° 28' 48" N, 31° 3' 0" E) and Rwamwanja (0.205°N 30.586°E) refugee settlements in Kyegegwa and Kamwenge District in western Uganda respectively. Limited studies have been conducted in these refugees' settlements targeting secondary school refugee students in Ordinary level responding to how participation in school clubs affect their psychosocial well being

### 1.4.3 Time scope

This study took 18 (Eighteen) months from January 2023 to July 2024. That is from submission of research concept note to submission of the final report. The researcher collected primary data from refugee secondary school going students from the above-mentioned study sites. Data from a Sample of schools was collected and used for analysis.

## 1.5 Conceptual framework

**Figure 1: Conceptual Framework**



### **Independent variables Dependent Variables**

Source: adopted from (Ryff, C. D., & Keyes, 1995) and modified by the researcher.

### 1.5.1 Operational definitions for Outcome variables

**School club:** These are extra circular activities that assist students to cultivate a sense of unity and working with others in reaching the same goals. Students develop social skills, Clubs facilitate students to meet, mix, and work together with other students from different backgrounds in a diverse environment. School clubs are one of the mechanisms that can provide spaces for children to participate, acquire life skills and strengthen their voice and institutions. School clubs also provide a safe space for learners to nurture and develop life skills to make informed life choices. Through participating in club activities, children and young people learn to prioritize and manage time well, gain insights into possible career aspirations. School clubs therefore contribute to the overall well-rounded learning experience both in and outside of school (King, 2021).

**Self-esteem:** It is confidence in one's own worth or abilities. Self-esteem encompasses beliefs about oneself as well as emotional states, such as triumph, despair, pride, and shame. Self-esteem can influence life in myriad ways, from academic and professional success to relationships and mental health. Self-esteem, however, is not an immutable characteristic; successes or setbacks, both personal and professional, can fuel fluctuations in feelings of self-worth (Monteiro et al., 2022).

**Stress:** It is defined as a state of worry or mental tension caused by a difficult situation. Stress is a natural human response that prompts us to address challenges and threats in our lives. Everyone experiences stress to some degree. The way we respond to stress, however, makes a big difference to our overall well-being. Stress affects both the mind and the body. A little bit of stress is good and can help us perform daily activities. Too much stress can cause physical and mental health problems. Learning how to cope with stress can help us feel less overwhelmed and support our mental and physical well-being (Lu et al., 2021).

**Resilience.** Resilience is the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioral flexibility and adjustment to external and internal demands. It's important to note that being resilient requires a skill set that you can work on and grow over time. Building resilience takes time, strength, and help from people around you; you'll likely experience setbacks along the way. It depends on personal behaviors and skills (like self-esteem and communication skills), as

well as external things (like social support and resources available to you). Being resilient does not mean that people don't experience stress, emotional upheaval and suffering. Demonstrating resilience includes working through emotional pain and suffering (Williams & Drury, 2009).

### **1.5.2 Theoretical Framework**

Several models support the possible psychosocial factors related to Psychosocial well-being. From a general perspective, the psycho-educational approach is an integral framework for the development and evaluation of Psychosocial and educational constructs such as social skills, empathy, self-concept, anxiety and emotional intelligence, among others.

### **1.5.3 Complete state model of mental health**

This model was proposed by (Keyes, 2017) and it posited that an individual has 'complete mental health' when they have both a high level of wellbeing and a low level (or no diagnosis) of mental illness. The Complete State Model of Health (CSMH) considers mental health as a series of symptoms of pleasure (Su et al., 2020) and positive functioning, operationalized by measures of subjective, Psychosocial, and social well-being. This model has empirically confirmed two new thoughts rather than forming a single bipolar dimension, health and illness are correlated unipolar dimensions, and the presence of mental health which implies positive personal and social functioning.

A systematic scoping review was performed to amalgamate and synthesize the research on the complete state model, aiming to examine the evidence of the model's validity, and to pragmatically summarize the implications of the model. Results of this scoping review were presented, with a key focus on the quality of extant literature on the model, and a practical summary of the implications for policy makers and practitioners (Morales-Rodríguez et al., 2020a). By transforming our understanding of the relationship between mental health and mental illness, the complete state model underpinned significant mental health reform for the future.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

Literature from past studies related to objectives of this research were acknowledged in this section. The researcher analyzes critically the concept of school clubs' influence on psychosocial well-being of secondary school students in refugee communities. The section underpins existing gaps in similar studies and expresses new evidence explained by evidence generated by findings in this research.

#### **2.1 School club and Students' stress levels**

“Stress is one of the unpleasant phenomena associated with the lives of humans. Several authors have defined the concept of stress in diverse ways” (Ramahsendran et al., 2017). Ramahsendran indicated that “stress is the insight of incompatibility between a person’s ability to fulfil the burden from the environment. This implies that there is always an environmental or social demand which must be fulfilled based on a persons’ ability. One’s inability to fulfil these demands makes them uncomfortable and this causes stress”. “Stress has been identified as a 20th century disease and has been viewed as a complex and dynamic transaction between individuals and their environments”. “Stress occurs when one is confronted with a situation which is perceived to be overwhelming and one cannot cope with such a situation” (Edjah et al., 2020)

“In today's ultra-competitive environment, students face more stress than ever be it related to studies, examination, peer, teachers or parent's pressure. Researchers have found that the perception of high stress levels in students can lead to poor academic performance, depression, attrition and serious health problems”. “Stress is a perception of emotional or physical tension” (Jain et al., 2017a). “There are a number of incidents in a person’s life that lead to negative emotions like anger, frustration and nervousness that further develops stress in an individual. Stress is the body’s reaction to challenge or demand. It can be positive at times, however prolonged stress can lead to severe health conditions” (Jain et al., 2017b). “Stress levels can differ based on how one reciprocates to a certain situation” (Naik& Shweta, 2022). “Some people just do not care and do not get anxious, they perceive stress as

trivial knock and move on in life on daily basis. Others worry about themselves more than required and affects their health. Stress is considered as a negative, behavioral, physiological process that takes place when the person tries to adapt or compromise with stressors” (Alharbi et al., 2018).

“Higher levels of stress in Chinese students compared to Australian students. The study entailed a mixed method design wherein students completed an open-ended item to describe the main sources of stress anxiety in their life and filled out the Depression Anxiety Stress. Whereas the findings showed that Australian students displayed ‘mild’ to ‘moderate’ in severity”. In comparison, “the Chinese international students reported significantly higher levels of stress and anxiety than Australian students, with both levels falling in the ‘moderate’ level of severity range” (Zhao et al., 2022b). Also, a study conducted in US found out that, “higher levels of stress amongst Asian international students compared to European international students and those with US residency (students holding a green card)” (Rai et al., 2021). (Reddy et al., 2018) “in their study concludes that stream wise difference in stress does exist in students. It is important to deal with stress at personal, social and institutional level. Remedies such as feedback, yoga, life skills training, mindfulness, meditation and psychotherapy have been found useful to deal with stress”.

(Richard, 2019) reported that “stress is a contributing factor in causing numerous emotional and behavioral difficulties, including depression, anxiety, temper tantrums, child abuse, physical assaults, destructive expressions of anger, feelings of inadequacy or failure, feelings of bitterness and resentment, irritability and impatience. Furthermore, stress affects productivity, or the output students make. When students are stressed up, they turn out not to give their maximum best when doing schoolwork and as a result, it manifests in the outputs which are clearly seen in the grades. Stress makes students spend fewer hours trying to get some schoolwork done, and they also do it in a shabby manner” (Essel&Owusu, 2017).

(Young, 2017) studied “the influence of stress on 88 secondary students of approximately 15 years of age. Students wrote comments on 1 of 14 fictitious results obtained from empirical studies and then completed assessing school-related stress and anxiety. The fictitious results created four experimental conditions: - they made no mention of stress, merely mentioned stress or indicated that a low or high production of students in the reference group experienced severe stress. They showed that mere mention of stress in the fictitious study did

not influence secondary students' perceptions of experienced stress". However, "exposure to fictitious study results indicated that a high proportion of reference students experiencing severe stress resulted in increased indications of stress on the questionnaires" (Young, 2017b).

(Murali and Ilamathi, 2021) "researched on the higher secondary students and implied that male students are more stressed than the female students. Urban students' academic stress is greater than the rural students. Government school students' stress is lower than the private school student's stress". "Students from Science stream are more stressed than the students from Arts" (Sharma et al., 2021). Also study by (Deb et al., 2018) on 400 male students from five private secondary schools in Kolkata who were studying in grades 10 and 12. "Thirty-five (35) percent students were found to have high academic stress and 37 percent were found to have high anxiety levels. Students with marginal grades were said to have a higher level of stress as compared to students with better grades. Also, students involved with extra-curricular activities were noted to be more stressed as related to those students who were not involved"

"Mental health of teenagers get affected due to academic stress. Girls with academic stress were found to have poor mental health as compared to the boys". This was accounted for in the study that parents at times put pressure and strain on students that leads to deteriorated mental health. According to (Gosar et al., 2019) in his study "claimed that stress can be addressed by ensuring that the students give utmost importance to their welfare. Food, exercise, work, recreation is some of the areas to focus on". (Zhang et al., 2022) in his revealed that, "the use of various methods to curb stress. Doing one Physical exercise on daily basis can address the concern of stress". "One can also adopt various time management tools and get involved with leisure activities which can benefit students" (Kubricka et al., 2016). Also, it was suggested that "colleges should have a conducive ambience to curtail stress. Change in the style of delivery from teachers end and providing mentors can bring fresh air to the teaching style" (Onjoro & Veronica, 2015b).

"Students doing sciences, especially in medical schools, experience a compelling amount of stress daily" (Gruyal and Abigail, 2021). "The causes of stress in medical schools are multifactorial, but a study at a Malaysian medical school has found that its relationship does not cause relevant differences in overall patterns of stressors, and that academic-related

matters, in general, are still the primary root stressors experienced by medical students” (Kötter et al., 2017)

Support system, acceptance of one ‘s vulnerability to emotion, socialization, active involvement, positive reinterpretation, problem solving, and rationalization are just some key strategies promoting better management of stress and other positive outcomes (Perry et al., 2018)(Perry et al., 2018). Several studies have recommended the relevance of social support from the institution’s faculty and counseling services peers, family and participating in extracurricular activities, as the most helpful coping mechanisms, especially to students who are at risk of high levels of stress (Namasaba et al., 2022). It was also suggested that encouraging the participation in extracurriculars promotes positive and healthier behaviors that can be a means of de-stressing for most students (Fares et al., 2016).

Students who claimed that they did not participate in extracurricular activities had a significant positive association with academic stress, hence, suggesting the significance of participation in extracurricular activities as a possible means to healthily cope with the academic stress experienced (Gottfried, 2021). According to (Bakoban and Aljarallah, 2015), students who participated in extracurricular activities related to music, physical exercise, playing sports, socializing without alcohol, their hobbies and joining organizations reported to be less stressed as compared to those who do not. (Furda and Shuleski, 2019) showed that the academic adjustment of students who actively participate in extracurricular activities fared better.

(Parrott and Cohen, 2019)compared individuals in unstructured activities (playing video games, watching tv) to participating in structured after-school extracurricular activities and found adverse outcomes for students in unstructured activities, but multiple positive results for those involved in extracurricular activities. These included stronger social skills, development of their own identity, and greater self-efficacy. (Schaefer et al., 2016) in their study found out that not only participation improve social skills through a positive peer context, but also found a higher academic adjustment and improved wellbeing. Organized high school extracurricular activities allow students to develop skills, explore opportunities and develop relationships with peers and adults in a safe learning environment with no stress (Nelson-addy, 2017). Research shows that “students’ involvement in extracurricular activities

can have a meaningful influence on their mental health and emotional well-being” (Guilmette et al., 2019a).

Guilmette et al., (2019) found “a connection between involvement in extracurricular activities and positive outcomes of wellbeing without stressful life. They identified a positive 3 relationship between prior and current participation in self-regulating goals, which has led to higher achievement and emotional well-being”. According to the study by (Blomfield and Barber, 2017) found out that “the students reported a lower level of depression for participants in structured extracurricular activities than students who did not participate. The current literature suggests that participation in various types of extracurricular activities can lead to multiple outcomes”.

According to (Acharya and Pillai, 2022) student’s involvement in extra circular activities is significant in maintaining “their well-being, whereas they prefer to join in the skill development activities to upgrade their employability skill and reduce their stressful life”. “Participation in recreational activities like music, dancing, theatrics, sports, photography, and artwork gives more happiness and improves students' well-being” (Kelly, 2017). An interesting observation is that “a good number 351 (66.5%) of the respondents believed participation in extracurricular activities makes university life more fun and less stressful, while 35 (6.6%) of them disagreed with this point of view” (Hranush et al., 2020a). “A quarter 142 (26.9%) of the respondents believed that engagement in extracurricular activities sometimes lessens stress of university life and makes it fun. Thus, it can be assumed that students’ participation in extracurricular activities helps them enjoy university life and relieves stress caused by transitional challenges” (Hranush et al., 2020b). “Among the many common reasons mentioned about attending extracurricular activities were to pass the time and have fun, the ability to talk and making many friends, depart from the study environment and daily routine, integrate and try to deal with males, getting out of school stresses, honestly a lot of fun activities and contribute to spending fun time and the activities are performed excellently with others” (Finnerty et al., 2021).

## **2.2 School club and Students’ self esteem**

“Self-esteem is a life skill that is highly embraced by all societies at all stages of development”. It is the process by which individuals rate themselves, acquire knowledge,

skills and attitudes to enable them to participate effectively in society” (Kariuki et al., 2019). According to (Kariuki, 2021), “self-esteem education somehow determines the level of prosperity, welfare and security of people. It is the cornerstone of economic and social development, and a principle means of improving the welfare of individuals. In his study on the influence of self- esteem on the study habits of students in America”. (AlvaManuel and Chilca, 2017) points out that, “high school learners need to accept and value themselves to do well in their academic work”.

“Self-esteem is the value-judgment that a person passes on himself. The nature of one’s self-evaluation has profound effects on a man’s thinking- process, emotions, desires, values and goals” (Gamage et al., 2021). To understand any human being Psychosocially “one must understand the nature and degree of his self-esteem and the standards by which he judges himself. Self-esteem is the integrated sum of self-confidence and self-respect. It is the conviction that one is competent to live and worthy of living” (Abdel-khalek& Ahmed, 2017). “Self-esteem plays an important role in shaping the thought and aspirations of students’ life and professional career. Therefore, confident people think of long-term visions, unlike those with temporal perceptions in accordance with the actions and impression of others. Conversely, it is also due to their ability to act in accordance with the primary goal, by admitting mistakes” (Prihadi and Kususanto, 2016; Huynh et al., 2022). ;(Huynh et al., 2022; Blegur et al., 2021) stated that “honesty is an individual’s attitude/behavior of not lying and cheating. The definition emphasizes on the fact that the act of being honest or accepting mistake is carried out to maintain subjectivity”. “Individuals with low self-esteem exhibit deviant behavior, such as cheating, disloyalty and tend to be aggressive” (Andreas et al., 2017)

(Rosi et al., 2019), observes that “self-esteem may be helpful only in some job contexts. Laboratory studies have generally failed to find that self-esteem causes good task performance, with the important exception that positive self-esteem facilitates persistence after failure”.” students high in self-esteem claim to be more likable and attractive, to have better relationships, and to make better impressions on others than people with negative self-esteem, but objective measures disconfirm most of these beliefs” (AlvaManuel&Chilca, 2017b). (Zhang et al., 2019) revealed that “positive self-esteem makes people more willing to speak up in groups and to criticize the group's approach”. “Leadership does not stem directly from self-esteem, but self-esteem may have indirect effects. Relative to people with negative

self-esteem, those with positive self-esteem show stronger in group favoritism, which may increase prejudice and discrimination” (Christian et al., 2016a).

According to (Erozkan et al., 2016) “self-esteem has a strong relation to students’ happiness. Although the research has not clearly established causation, we are persuaded that positive self-esteem does lead to greater happiness”. (Christian et al., 2016) points out that “neither high nor negative self-esteem is a direct cause of violence. The highest and lowest rates of cheating and bullying are found in different subcategories of positive self-esteem”. “Negative self-esteem is more likely than high to lead to depression under some circumstances. Some studies support the buffer hypothesis, which is that positive self-esteem mitigates the effects of stress, but other studies come to the opposite conclusion, indicating that the negative effects of negative self-esteem are mainly felt in good times. Still others find that high self-esteem leads to happier outcomes regardless of stress or other circumstances” (Erozkan et al., 2016b).

Abdul and Makunda, (2018) noted that “positive self-esteem does not prevent students from smoking, drinking, taking drugs, or engaging in early sex. If anything, high self-esteem fosters experimentation, which may increase early sexual activity or drinking, but in general effects of self-esteem are negligible. One important exception is that positive self-esteem reduces the chances of bulimia in females. This shows that self-esteem whether high or low may not prevent misbehavior among students”. (Zhou and Lulu, 2021) highlights that the “benefits of positive self-esteem fall into two categories that is enhanced initiative and pleasant feelings. Furthermore, the study did not find any evidence that boosting self-esteem (by therapeutic interventions or school programs) causes benefits”.

In research carried out in America by (Lyubomirsky et al., 2015) points out that “the results of positive self-esteem to students are desirable and characterize individuals who have accepted themselves. He continues to say that students with positive self-esteem can live positively with what they are unable to change”. (Dittmann et al., 2022) also notes that “students suffering from negative self-esteem constantly berate themselves and are not able to maintain good relationships with colleagues and teachers”. (Stadtlander, 2021) observes that “the emotional conduct of people with low self-esteem, is manifested in their being critical of others, is full of pessimism, short tempered and never plan positively for their time and

resources. They may be devoid of rational character guidance and are easily addicted to alcohol and drug”.

“Belonging to a group makes one feel accepted, cared for, and supported which is a basic Psychosocial need within the social context of the school environment” (Mohamed et al., 2023). “Previous research has shown that school belongingness is linked to both positive and negative indicators of well-being” (Arslan, 2021). “Mental health correlates with self-esteem or a global reflection of how positively students feel about themselves” (Schulz et al., 2016). “Broadly, extracurricular participation has been linked to self-esteem and related measures of well-being” (KortButler&Lkortbutler, 2015). Moreover, positive experiences in one activity may extend across domains, potentially compensating for negative self-appraisals in other domains.

“Domain of activities is most beneficial for self-esteem” (Niveau et al., 2021). For example, one study found “an association between self-esteem and sports, student service, and academic activities, but no relationship with activities like performing arts, vocational groups, or school clubs” (Hanks, 2018). Another study found that “involvement in prosocial activities like volunteering and faith-based groups was linked to higher self-esteem, but that there was no such relationship for sports and performing arts” (Hirani et al., 2022) Finally, another study found “a relationship between involvement in school clubs and self-worth, but not for any other parameter of psychosocial well-being beyond self-esteem” (Gorski &Karlyn, 2021). On the other hand examples illustrated by scholars in above do not show a clear pattern emerging as the “best” fit activity to promote self-esteem.

(Hee et al., 2018) argues that “students’ participation in extracurricular activities promoted by schools can increase their school level engagement, which leads to the development of more positive attitudes towards school and towards learning. Students participating in extracurricular activities exhibit more positive perceptions of school and lower probability of school dropout”. According to (Ginosyan et al., 2019) “by participating in extracurricular activities, students develop a sense of belonging that positively contributes to their own identity”.

(Christison, 2013) claims that “participation in extracurricular activities contributes to academic achievement and social self-conception”. According to (Perry and Lavins-Merillat,

2018) “individuals with high self-esteem are inclined to utilize more adaptive self-regulatory strategies than low self-esteem individuals and contributing to one’s ability to cope with stress and bounce back in the face of obstacles”. (Crumpler, 2019) “emphasis on self-management skills like perseverance, coping skills, or the ability to adapt to changing situations originate from ones ability to socialize”. “Self-esteem functions as a robust Psychosocial predictor of mental health and well-being” (Craven & Marsh, 2016).

### **2.3 School club and Students’ psychosocial resilience**

(Simon, 2015) posits that “resilience is associated with increased quality of life, wellbeing and functional capacity in times of adversity”. “Resilience was significant in education as researchers revealed the reasons as to why some students succeed even though they face overwhelming odds” (Darlene & Deborah, 2017). Furthermore, the researchers noted that “students can possess educational or academic resilience. Arguing that academic resilience is not a “fixed” attribute of a few students, but it is alterable, and it can be developed and fostered” (Mullen & Kimberly, 2015).

George, (2014) argued that “unpleasant and potentially harmful experiences may protect the individual, ‘toughening’ them against future stressors, or may render the students more susceptible to later stress experiences. Rutter’s theory focused on the effects derived from controlled exposure to a stressor. Such inoculation is not always possible when confronted with typical life stressors; adversity often occurs in an unpredictable and unavoidable manner” (Rutter, 2006)(Rutter, 2006). However, his postulations have been validated in empirical work”. According to (T. Chen, 2015) “exposure to moderate levels of stress over the lifespan leads to the development of “adversarial growth” characterized by higher levels of Psychosocial functioning and well-being than previously experienced among their sample of elderly individuals, compared to those who experienced little stress and those whose life had been plagued with many stressful experiences”.

“Resilience is aimed not at quantifying risk and establishing social and emotional competences and understanding how persons interpret life stressors, dealing with the Psychosocial consequences in a manner that renders them either more or less capable to survive any future stressors that they may encounter” (Antonella et al., 2020). “Individuals adapt to positive life experiences such as entering university, getting married and having

children as well as adverse life events such as childhood abuse and recent illnesses or injuries” (Daines et al., 2021). The study conducted on early childhood reported that, “resilient children are at a high-risk of experiencing fewer illnesses and perceived as active, affectionate, and socially responsive by their parents” (Campbell et al., 2016). “Resilient children displayed additional traits, such as self-help skills, sensorimotor acquisition, and language development. In early adolescence, resilient children displayed good problem-solving skills, communication skills, and perceptual motor development” (Masten et al., 2018).

“Resilient Students possessed high internal locus of control, an achievement-oriented attitude, and positive self-esteem. In adulthood, resilient individuals were able to relate to numerous sources of support within their environment” (Janssen & Regenmortel, 2015). (Smith and Alexa, 2017) “provided evidence that the resiliency process may be different for men and women. When their sample was 31 and 32 years of age, scholastic competence at age 10 was more strongly associated with successful transition into adult responsibilities for men than for women. Factors such as high self-esteem, efficacy, and sense of personal control at age 18, however, were more predictive of successful adult adaptation among women than men. Differences were also found regarding loss of caregivers and the development of mental health problems” (Mikkelsen et al., 2020).

According to the study by (Russo et al., 2015) “fewer classrooms where significant student teacher interaction did occur had a much more difficult to ascertain differences between resilient and non-resilient students. The direct instructional approach that predominated in both reading and mathematics classrooms appeared to be much more suited to resilient students, who were motivated and attentive, volunteered answers, and received more teacher attention and praise than non-resilient students, who appeared bored, reluctant to answer questions, and at times reluctant to work” (Hersh et al., 2014a). “Overall, the qualitative findings indicated that resilient students were much more successful in classrooms that employed direct instruction than non-resilient students” (Hersh et al., 2014b).

“Promoting teacher and school resilience will facilitate the development of students’ resiliency” (Fisher et al., 2015). “Resilient students are the outcome or product of a resilient school climate. Another effective approach for promoting resiliency is the use of feedback from classroom observation and learning environment measures to help teachers understand

their current instructional strengths and weaknesses” (Banatao, 2016). Literature also reported different levels of resilience among university students, along with factors correlating with it. According to study by (Omari et al., 2023) reported “a moderate resilience among undergraduate students. Also, a study conducted in Jordan found a moderate level of resilience among university students, with resilience being negatively correlated with depression and positively with social support from family or friends” (McLean et al., 2021). Other studies also found “moderate level but with different correlates of resilience Psychosocial well-being, optimism, and mindfulness. Also, number of studies only explored predictors of resilience, without measuring types of clubs and duration of participation” (Idris et al., 2019)

Recent systematic review by (Kapikıran and Acun-Kapikıran, 2016) found out that “Psychosocial well-being is the most reported predictor of resilience. Different studies found quality of life, physical health, and supportive parenting to be correlated with resilience” (Widyawati et al., 2022). Other researchers explored the relation between academic achievement and resilience. In this domain, one study found that “resilience predicted academic achievement, meaning that the higher the level of resilience, the better academic achievement” (García-Martínez et al., 2022). In the Sultanate of Oman, where current study was conducted, “only one study explored the relationship between resilience and Psychosocial wellbeing among a group of university students and found a positive link between mental health and resilience” (Omari et al., 2023b).

Studies have shown that school clubs have a great impact on resilience of secondary school students mainly because they provide support which is a great driver to developing resilience (Cassidy, 2015). School clubs make youth freely mix up with their own ethnic peers and this creates a strong attachment needed for young refugee people to cope with resettlement. (Farahani et al., 2018) revealed that “mixing and having a strong attachment with their ethnic peers in refugees was associated with significantly greater levels of well-being in the Psychosocial, social and environmental domains all needed to create strong resilience”.

Mupenzi, (2016) argue that “people were not able to express themselves and communicate freely which left them feeling powerless and disadvantaged. Being able to communicate is crucial for refugee students, not only for a refugee person’s future, but also for their optimal physical and mental health outcomes” (Pratiwi&Cahyono, 2020). Therefore, school clubs

have been identified as language barrier breakers since they bring together students from different backgrounds and cultures thus creating resilience among them. Racism and discrimination are some of the parameters that impede young refugee students' resilience. According to (Gyan and Chireh, 2023), "young refugees experienced racism, especially within the school environment and this possibly affected their capacity to develop relationships with Australians. Studies show that students who associated themselves with others have great chances of overcoming racism and discrimination stereotypes". "School clubs are essential in breaking trauma story, negative stereotyping of refugee people especially those in secondary schools and therefore impacting heavily on a person's sense of self and eventually their resilience" (Farahani et al., 2018b)

"Co-curricular activities such as sports clubs, music dance and drama in schools, studies have revealed that resilience is achieved since students experience a tremendous amount of physical and mental growth on a daily basis needed to approach new life situations and experiences with confidence and a positive mindset" (Silver, 2018). Research further shows that "resilience is built in young people when they feel something bigger than themselves. When teens feel lonely, isolated, they are more likely to encounter setbacks that affect their optimism advises that students should engage with the school and community by volunteering at events, mentoring younger students or participating in whole-school events such as the school musical groups/ clubs as this will make them understand and appreciate what is happening with their peers and this will instill in them a resilient belief that their involvement can and will have a positive effect" (Nicholls et al., 2021). (Wilson, 2016)discussed the "concept of structured extracurricular activities as a strategy for schools to build resiliency, support pro-social behavior, offer opportunities for engagement with school and related activities, and provide constructive academic performance and growth in subjective well-being. One of the methods discussed was trying to establish a school-identity for students. Students who identify with schools have an internalized sense of belonging, are discernibly part of the school environment, and the school constitutes an important part of their own experience".

#### **2.4 School club and psychosocial wellbeing**

"Psychosocial parameters are important in mitigating mental health adversities among school going adolescents" (Cavioni et al., 2021). In situations of humanitarian environments,

adolescents specifically will need to be at pa emotionally and physically in order to excel in life (WHO, 2021). According to (OECD, 2018), “about 10–20% of children and adolescents worldwide experience psychosocial challenges leading to mental disorders and half of all mental illnesses begin by the age of 14 and three-quarters by mid-20s”. As a crucial stage, students getting involved in school clubs such as health clubs, science clubs, and environmental clubs can be of help in reducing these mental illnesses.

Club patrons in form of teachers play a very big role in mentoring their students; however, teachers themselves need psychosocial support to perform their roles better (Amini& Moses, 2018). In a review on teacher wellbeing by (Jimenez, 2021) “Stress the importance of addressing teacher’s Psychosocial needs before they can be expected to support the Psychosocial and cognitive needs of their students. Psychosocial support provided by clubs is vital in promoting reliance and wellbeing among youths(Stefani et al., 2015). School clubs provide opportunities for students’ involvement in activities that create well-being, “as well as a platform for developing mental resilience” and these activities promote practice, discipline, organization, and teamwork (Subramanian &Kokila, 2019). Studies also show that “Psychosocial well-being is a dependable predictor of health and long-term positive adjustment” (Gómez-López et al., 2019).

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 Introduction**

The Chapter presents research design, area of the study, study population, sampling procedures, sample size, sampling techniques, data collection methods and instruments, quality control methods, validity, reliability, data management and processing, data analysis, ethical considerations, limitations of the study and conclusion.

#### **3.1 Research Design**

The research design is a strategy of inquiry, a set of skills, practices and assumptions, that enable researchers to proceed from the paradigm to the real” (Lincoln, 2007). The study employed “a cross-sectional design. It allowed the researcher to evoke discussion, collect honest feedback, opinions, and responses from the respondents” (Ponto & Julie, 2015). A Survey was a practical solution for data gathering within the shortest period (Gaille, 2020). The study utilized mixed approaches. However, quantitative techniques predominated, based on variables measured with numbers and analyzed with statistical procedures (Creswell, 2003). On small scale qualitative approach was used to obtain more detailed data to supplement the quantitative information

#### **3.2 Area of the Study**

The study covered Bidibidi, Palorinya, Kyaka II and Rwamwanja refugee settlement. “Bidibidi covers 250 square kilometers of the eastern half of Yumbe District, stretching southward from the South Sudanese border and spilling over into Moyo District along the western bank of the Kochi River. Bidibidi is divided into zones. It has five zones that is bidibidi zone one, Swinga zone two, Yoyo zone three, Zone 4 (Abrimajo and Annex), Ariwa zone five. Rwamwanja refugee settlement was established in 2005 to receive the remaining population of KyakaII, following the mass repatriation of Rwandan refugees the same year. Rwamwanja encompasses 81.5 square kilometers in the three sub counties of Mpara, Kyegegwa and Kabweza in the eponymous Kyaka County. The settlement is divided into

nine zones: Sweswe, Buliti, Bukere, Mukondo, Ntababiniga, Kakoni, Bwiriza, Byabakora and Kaborogota”(Klabbers et al., 2023) and UNHCR dashboard (2024).

### 3.3 Study Population

It is defined as the “group or groups of interest to the researcher in relation to the study” (Given, 2008). The study population was ordinary level secondary school refugee students. This category was identified since reports on suicide usually show children in the age category 13 to 18 as major victims (Hami et al., 2011). The unit of analysis constituted secondary schools in refugee settlement with a target of ordinary level students. The study population (10,725) was refugee secondary school students in Bidibidi, Palorinya, Kyaka II and Rwamwanja refugee settlement in Uganda obtained from Education response Plan secretariate 2023.

### 3.4 Sample size Determination

It is an important aspect to consider before collecting data. The optimum size of the sample relates directly to the type of research being undertaken. Quantitative samples are usually more that qualitative in terms of size, aiming at establishing representativeness of the characteristics of the study population (Bartlett et al., 2001). Followed Krejcie& Morgan (1970) formula while calculating the sample size from enrollment population of 10,725. Using the formula below a sample size (S) of 150 students were considered. Purposively 8 FGDs with students were conducted.

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

Where S = required sample size,

Z=1.96 for 95% confidence level,

P = population proportion (expressed as decimal) assumed to be 0.5 or 50%,

N = the total population and d is the degree of accuracy (5%), which is the significance level.

#### 3.4.1 Sampling Techniques

The study employed stratified random sampling techniques and purposive sampling techniques. Stratified random sampling was used since the respondents had homogenous characteristics based on gender and level education. This allowed for representation of all

categories fairly. Secondary school learners that participated in Focus Group Discussion were sampled purposively (Oso & Onen, 2009). The students' samples were picked from a randomly selected sample of schools. Teachers represented opinions and experiences of Key Informants.

### **3.5 Data Collection Methods and Instruments**

Mixed methods approaches were used, both quantitative and qualitative. These included Quantitative Survey and Focus group discussions. The questionnaire included a set of questions programmed into KoboCollect mobile application in defined order. For accuracy, the questionnaire was programmed into digital format with skip logic and restriction to avoid inconsistencies. The interviewed respondents and gathered data from all those interviewed.

#### **3.5.1 Data Collection Instruments**

The researcher collected data from primary respondents using Quantitative Questionnaire and Focus Group Discussion and Key informant interview guides for qualitative data.

#### **3.5.2 Interview Questionnaire**

“Questionnaire is any written document that provide respondents with a sequence of questions or statement in which they are to respond either by writing out their answers or choosing from an already existing or given answers” (Yakub, 2019). The study used a Likert scale of 1 = Strongly Disagree, 2 = Disagree, 3 = Not Sure, 4 = Agree and 5 = strongly for all the sections of the questionnaire.

#### **3.5.3 Interview Guide**

The interview guide facilitated Focus Group Discussions with targeted category of learners to allow probing, prompting and clarification of unclear information. The interview guide had a set of “open-ended questions” (Hobbs & Ong, 2023) *See in the annex section*. In each discussion session, between 8 to 12 leaners were involved and these were school club leaders.

### 3.6 Quality Control Methods

The researcher conducted principal factor Analysis and reliability for items in the composing the outcome variable, validity tests for the items in the Qualitative tool. Through Principal Factor Analysis (PFA) there is an ability to explain the data structure starting from identifying the underlying factors that drive the variables used. The technique generalizes the complicated data while simplifying it using dimensionality reduction thus enabling simple interpretation and decision making (Gallo et al., 2016; Tan et al., 2021; Weissenburger-Moser et al., 2017).

#### 3.6.1 Validity

“Validity is the ability of the research instrument to measure what is supposed to measure. If the instrument contains a representative sample of the universe subject matter, then the validity is good. There are various types of validity including construct, content, face, and criterion related validity. In this study content and construct validity were measured. Content validity is the extent to which the instrument provides adequate coverage of the investigative questions guiding the study. Content validity is also known as logical validity and refers to the extent to which a measure represents all facets of a given psychosocial construct (Cooper and Schindler, 2006).

The followed guidance from the lecturer at Uganda Martyrs University Nkozi (supervisor). The questionnaire was also pilot tested before being fully applied for data collection.

“Content validity of the instruments was measured by making them conform to the study’s conceptual framework and research questions. Finally, the researcher assessed validity using content validity index (CVI) adopted from” Trochim (2006).

$$\text{CVI} = \frac{\text{Total number of questions rated as relevant} \times 100}{\text{Total number of questions in the questionnaire}}$$

Trochim (2006) notes that if the outcome of the computation is 0.7 and above, the instrument is considered valid for use in the data collection exercise, and this was done after coming up with the final tool.

#### 3.6.2 Principal Factor analysis

To capture maximum variance in the data while reducing dimensionality, Principal Component Analysis (PCA) was executed (Bro & Smilde, 2014). This was a powerful tool that helped simplify complex ordinal Likert scale by revealing underlying patterns (Beattie & Esmonde-White, 2021). See results of the PFA and optimal scaling in chapter six.

### 3.6.2.1 Reliability

After performing dimension reduction using the Principal Component Analysis (PCA), the researcher also ensured that the instruments retained are reliable. Hence “Cronbach’s coefficient alpha was computed to determine reliability of items (how items correlate among themselves). To test for the internal consistencies of the scales used to measure the variables, the alpha values are expected to score a range above 0.5 or above 0.72” (Nunnally, 1978).

“Reliability is a measure of the degree to which instruments yield consistent results or data after repeated trials. It establishes if the measure can yield the same results on other occasions or that similar observations are reached by other observers” (Mugenda and Mugenda, 2003).

**Table 1: Reliability Test for outcome variables.**

Study Construct	Number of Items	Cronbach Alpha	Decision
Stress	2	.828	Reliable
Psychosocial Resilience	4	.764	Reliable
Self-Esteem	3	.758	Reliable

“Cronbach coefficient which was used to assess the internal consistency or average correlation of items within the test was used. Alpha equals zero when the true score is not measured at all and there is only an error component. Alpha equals 1.0 when all items measure only the true score and there is no error component. If the alpha values are too low, items had little in common” (Nunnally, 1978). His suggestion is that “for a value not less than 0.7 to be acceptable” while *Sekeran (2003)* posits that “any alpha values between 0.5 and 0.8 are adequate to accept internal consistency. This study adopted the alpha lowest alpha as 0.5 upwards”. Table 1 presents the alpha values of the questionnaire items.

### 3.6.3 Multicollinearity tests

In wake to ensure that the study results “are worth using for decision making, certain assumptions were set and met through running statistical tests (normality and multicollinearity)” while running categorical Regression analysis models to avoid type one or two errors (*Osborne et al, 2001*). For example, p value, correlation coefficients, importance and tolerance statistics were used (*Setiani& MAD, 2022*).

### 3.6.3.1 Normality Test

The normality test was used “to establish whether the data is normally distributed. The more data is normally distributed the less distortions in establishing relationships between the variables” (*C. C. Wang & Lee, 2020*). Here statistical test Kolmogorov-Smirnov was considered. It was considered since the number of observations was more than 100.

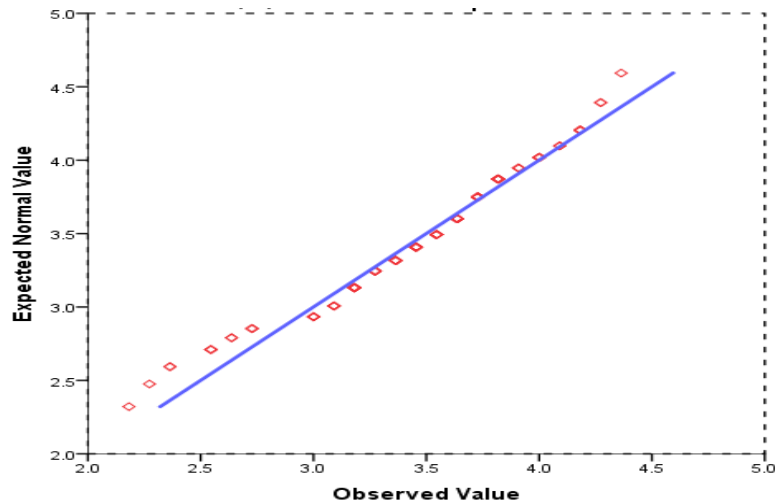
On the other hand, “when normality assumption is violated, interpretation of findings and making inferences become largely unreliable or invalid” (*Schmidt &Finan, 2018*). In statistical approach this study employed Shapiro-Wilk and Kolmogorov-Smirnov test. See findings in the table below.

**Table 2: Tests of Normality**

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk	
	Statistic	Df	Sig.	Statistic	Sig.
Stress	0.154	118	0.01	0.956	0.00
Psychosocial Resilience	0.133	118	0.01	0.956	0.00
Self-Esteem	0.144	118	0.01	0.963	0.00

*Source: Field Data (2023)*

“If the p-value is greater than the chosen alpha level, then the hypothesis that the reported scores by respondents was not normally distributed is rejected. The results of the normality tests executed among all the study variables indicated that all p-values were more than the alpha level of (0.05) (*Lakens, 2021*). Thus, the reported scores were normally distributed. Besides, normality of average constructs for is shown through plotting. The plot is presented in Figure below.



**Figure 2: Distribution of scores on psychosocial wellbeing constructs**

*Source: Field Data (2023)*

In Figure above, “the normal Q-Q plots indicate that” mean scores of psychosocial wellbeing constructs were normally distributed (Laerd Statistics, 2016). Normal distribution became one of the significant determinants for subsequent multivariate regression and engineered confidence for in-depth analysis.

### 3.6.4 Multicollinearity Test

Magnitude of standard errors while running multivariable models, Multicollinearity effects were tested. “Multicollinearity is a statistical scenario where two or more predictor variables in a multiple regression model are highly correlated, showing non-trivial degree of accuracy” (Shrestha, 2020). Inaccuracy is shown by greater Multicollinearity since it coincides with standard errors. Very wide range between confidence intervals and very small t-statistics.

The Tolerance statistic is a tool that was used to test multicollinearity. “For **Tolerance** values ranging from 0 to 1, value close to 1 indicates that there was no significant multicollinearity. There for variables with no significant multicollinearity were considered in the regression model with confidence. Conversely, a tolerance value close to 0 suggests significant multicollinearity” (A. Nechval, 2016). Therefore, Multicollinearity tests for this study were executed along within the regression analyses using the Tolerance statistic

### **3.7 Data Management and Processing**

Data, which was collected, was directly entered into Open Data Kit (ODK), then transferred to Microsoft Excel for verification, cleaning, and modification. The fine-tuned datasets were exported to the SPSS Version 25.1 to generate descriptive and inferential statistics. For qualitative data, the interviews carried out transcribed for further management.

### **3.8 Data Analysis**

Categorical Regression (CATREG) was performed to test hypotheses and answer the underlying research questions while thematic analysis was performed to explain the quantitative data” (Joffe& Greenland, 1995)&(Braun & Clarke, 2006).

#### **3.8.1 Quantitative Data**

The quantitative data was collected using “Computer Assisted Programmed Interviews (CAPI) where Kobo Collect application was used. In this case the interviewers had the tool programmed on tablets while interacting with the respondents” (Mergenthaler et al., 2022). This helped in improving timeliness and saving costs double data capturing as well as improve data quality.

The collected data was cleaned, sorted, and entered Microsoft Excel. Data processing involved cleaning, labelling variables, and defining them. It was later analysed using the Statistical Package for Social Scientists (SPSS-Version 21) computer software. Factoranalysiswas performed toexaminethe most valid questions in study variables. Besides, inferential statistics were used where Pearson’s correlation coefficient was computed conducted to establish the association between the predictor independent variables and the dependent variable. “Hierarchical regression was conducted to test the predictive power of the study variables. Further,Anova analysis was done to test the study hypothesis and model significance” (Mustapha et al., 2021).

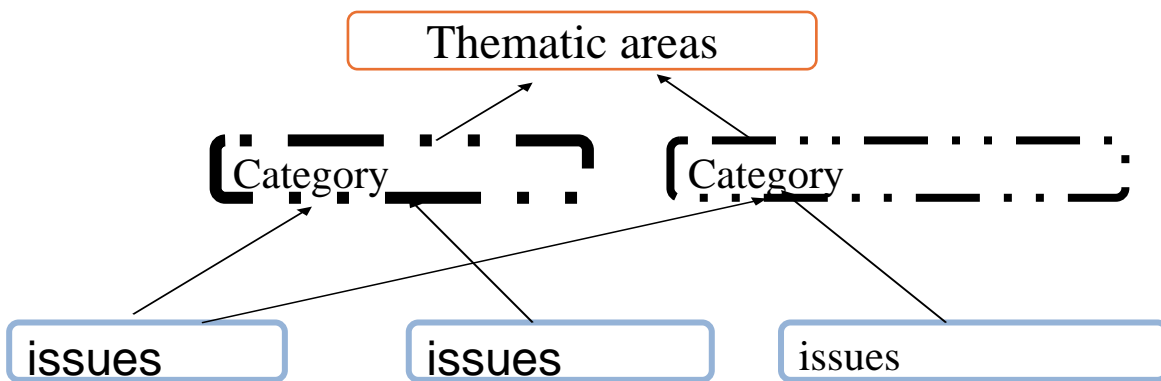
#### **3.8.2 Qualitative Data**

Qualitative data analysis was done using manual “thematic categorization and making sense of the essential meanings of the phenomenon. The data was analyzed in line with study

objectives and research questions. The text in italics with quotes in this report indicates the information provided by the participants.

The researcher studied the excerpt from the transcript which involved: Interpreting the discussion between the interviewer and participant. Each transcript was anonymised to ensure confidentiality of the respondent” (Khafaga&Shaalan, 2022).

Identifying “range of issues raised in the data, and understanding the meanings attached to the issues by participants was done through manual data synthesis. Those became topical markers as inductive theory development approach was used” (Amin, 2005).



### 3.8.2.1 Levels of Analysis

Identify issues, description and “making comparisons among different participants and later Categorizing issues through groups with similar attributes into broad categories and represent a higher order grouping of data until saturation (when the researcher was no longer identifying further categories in the data)” *Glaser and Strauss Theory (1967)*. This was based on the grounded theory as stressed by

### 3.9.1 Ethical Considerations

The researcher was mindful of ethics in research. The researcher particularly sought permission from Uganda Martyrs University school of research and graduate training to undertake the field work. The rights of the respondents were respected, respondents’ consent was sought and none of the questions included were leading to or embarrassing or used in a form that abused the respondents’ rights in any way. During the research process, the

respondents' details were kept anonymous, and confidentiality maintained. And lastly, an emphasis was made to ensure that the information was kept in privacy and reported in summative and solely used for purposes of the research.

### **3.9.2 Consent**

“As a way of observing ethical standards, a verbal informed consent was sought from participants with a guarantee to withdraw from the research at any stage of the interview. The researcher first introduced herself to the responded and explain the reason for the research and ask for the participant’s consent” (Kipperman, 2023).

### **3.9.3 Confidentiality and anonymity**

It is in the best interest of the research as stipulated by the principles of research on Human subjects to “ensure confidentiality so as to protect participants as their dignity and integrity may be destroyed in case their identity gets known. Anonymity was ensured by giving participants pseudo initials in place of their names and during reporting, participant direct names were not used, but instead anonymised” (*Williams and Pigeot, 2017*).

The researcher upheld confidentiality of all research participants through providing a safe space for conducting research. This was ensured by carrying out research in a private room, asking for consent to record audio.

### **3.10 Limitations**

Key among the limitations that came up included, some respondents unwilling willing to participate in the study. However, this was overcome by building rapport with the respondents. Another challenge was inadequate time allocated for collecting, analysing, interpreting and presenting field data. However, the researcher embarked on field work early enough, and hired the services of a qualified person to serve as a research assistant. High bureaucracies in refugee settlement authorities caused some delays during data collection.

During the data collection process, the researcher encountered bureaucracy from various stakeholders, however this was handled by ensuring that the researcher obtains permission from the appropriate authorities.

## **CHAPTER FOUR**

### **RESULT PRESENTATION & DISCUSSION**

#### **4.1 Introduction**

The Major aim was to examine extent to which belonging to a school club affects psychosocial wellbeing of secondary school students in refugee communities in Uganda. Four specific objectives were set, and corresponding hypothetical research questions. This chapter presents the first level of analysis with general findings per objective. It lays the foundation for various statistical tests. Results in this chapter have been presented using “descriptive and inferential statistics, providing the premise on which further statistical operations and analyses were carried out to test study hypotheses”(Surbhi, 2019).

The analysis followed a structured questionnaire showcasing the emerging results of each variable. For each specific question, responses were obtained from presenting statements in a score of “Likert scale ranging from 0 to 5” (Douven, 2018).

Respondents responded to questions during the interviews at their will, no one was forced to participate. They shared their experience as far as school clubs and psychosocial wellbeing is concerned. The details of “descriptive analysis was presented in tables where descriptive statistics like frequencies, percentages, mean scores, Standard Deviation, t-tests, among others” (Mishra et al., 2019).

##### **4.1.1 Response rate**

It is important to note that out of the 150 respondents targeted for this study only 118 (79%) voluntarily accepted to be interviewed while 21% refused. Main reasons for refusal were that some respondents were very busy attending classes until the data collection period was done, others we just shy.

It is noted that the point of acceptance to proceed with the results, despite the 79% response rate was based on comparisons with other scholars like *Awino&Mutua (2014)* who had targeted to engage 95 responders from Kenyan trade co-operations and managed to obtain

responses from only Sixty-three (63) accounting to response rate of 66.31 percent. Others in similar studies by (*Newbert, 2008*) had even lower “response rates rate of 22.9 percent”.

Therefore, response rate of 79% for this study is a moderately high rate of response since it falls within the acceptable region as indicated by many other scholars. In other words, “high response rates yield results that can be better inferred to a population” (Wu et al., 2022). To successfully reach this rate, the researcher first acquired clearance letter from the Country Director of Finn Church Aid, lead partner for UNHCR in Education for refugees in the said refugee settlements. The researcher ensured that all research assistants built a rapport as they collected data, adding an assurance of confidentiality.

#### **4.2 Demographic profiles**

For this very study, main demographic variables included Respondent's settlement, Sex, Class, Marital status, and age. The marital status of the respondent was considered because this could be an external factor that can impact psychosocial wellbeing state of a student. Additionally, the number of children a student had was imperative to know so as to set a ground information of the kind of respondents the researcher was dealing with, given the refugee context. Sex of the respondent was considered to obtain gender inclusive results.

Data was also collected from students in different classes of ordinary level within targeted refugee secondary schools in a bid to have multiple representation. Understanding the level of education of students was also useful because this could affect esteem. Stress and psychosocial resilience levels. Therefore, all these demographic characteristics shade revelation on nature of study participants.

**Table 3: First Demographic Profile**

	Frequency/Percentage
Bidibidi	30(25%)
Kyaka	33(28%)
Palorinya	17(14%)
Rwamwanja	38(32%)
Sex	
Female	62(53%)
Male	56(47%)
Class	
S1	36(31%)
S2	39(33%)
S3	22(19%)
S4	21(18%)
Marital Status	
Married	8(7%)
Not married	110(93%)
Have child or not	
Don't have a child	112(95%)
Have a child	6(5%)
<b>Total</b>	<b>118(100%)</b>

*Source: Field Data (2023)*

According to findings above, 53 % of respondents were females while 47% were males. The results therefore represent gender balance. Most students interviewed were in Senior one (S1) and Senior Two (S2) shown by 31% and 33% respectively. The majority were not married and did not have a child (93% and 95% respectively).

The table summarizes key characteristics of secondary school students' involvement in school clubs across different grade levels (S1 to S4). It highlights the average age of students, the number of clubs they participate in, the average club size, and the length of time spent in these activities. This data provides insight into trends in student engagement in extracurricular activities as they advance through school.

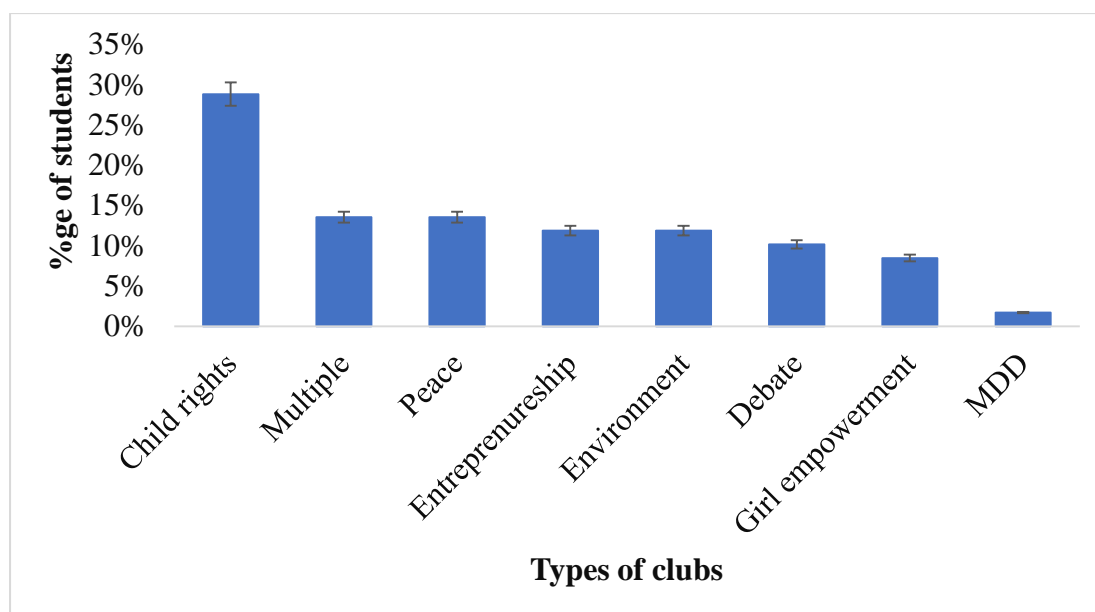
**Table 4: Examples of School Clubs and school Parameters**

Class	Mean Age of students	Number involved in	Average members per club	Year participating in school clubs
S1	16	11	30	0
S2	17	5	35	1
S3	18	9	33	1
S4	20	7	37	1
<b>Total</b>	17	<b>7</b>	<b>34</b>	<b>1</b>

*Source: Field Data (2023)*

The table above shows that students in secondary school classes (S1 to S4) have an average age of 17 years and typically participate in around 7 clubs with an average membership of 34 students per club. S1 students, who are younger, do not have any recorded participation in clubs, while S2 to S4 students spend about 1 year in club activities. Participation is highest in S1 (11 clubs) but decreases as students’ progress to higher grades, with club memberships slightly increasing in size across classes.

The figure below presents the distribution of student participation across various school clubs in refugee communities. It highlights the percentage of students involved in different types of clubs, such as child rights, peace, entrepreneurship, and girl empowerment. This data offers insight into the areas where students are most engaged and where participation is relatively low.



**Figure 3: Type of school clubs student Belonged**

The figure shows the distribution of student participation in various school clubs in refugee communities. The highest participation is in child rights clubs, with 29% of students involved, followed by peace and multiple clubs, each with 14%. Entrepreneurship and environment clubs both have 12% of students, while debate and girl empowerment clubs account for 10% and 8% participation, respectively. Music, dance, and drama (MDD) clubs have the lowest participation at 2%. This indicates a strong interest in child rights, with lesser engagement in creative arts activities like MDD.

### 4.3 Stress levels

**Objective one** assessed whether school club components influence stress levels of secondary school going children in refugee settlements in Uganda. Related studies already cited that the highest susceptibility to psychosocial problems like increasing prevalence of suicide attempts are more common among adolescents compared to other age groups. Age bracket 13-18 usually presents the most complex psychosocial case scenarios particularly successful suicide cases (Hami et al., 2011). Yet this group falls in the Net Enrolment age target for secondary school going children in Uganda where many suicide cases are prevalent. Despite the Psychosocial Support (PSS) extended to adolescents particularly those in refugee communities by refugee support partners, strengthening school clubs is one of common interventions. A diagnostic analysis of whether school clubs affect stress levels, self-esteem, and psychosocial resilience of learners in refugee setting was necessary, to confirm whether donor resources make an impact or not (Hillel, 2023).

Many scholars already pointed Stress and trauma as a correlate of a historical conflict environment, citing refugees as the largest victim world over. It was assumed that since Covid-19 lockdown perpetuated multiplicity of stressors globally, the 'moved' (migrants), mostly refugee students/pupils were overly affected, given their existing vulnerable circumstances. Therefore, accurate responsive mechanisms could remain a hit-or-miss (uncertain) if evidence on relationship between belonging to school club level of psychosocial wellbeing is not carefully studied. In this section, the situation related to stress, psychosocial resilience, and self-esteem and among learners was examined.

Generally, 90% of students revealed to have some varying levels of stress, 46.6% were psychosocially resilient, 49.2% had high self-esteem and 70.3% reported to have been psychosocially well. However, it was important to find out if these levels psychosocial

wellbeing parameters could be affected by some school club activities. **0 = Never, 1 = Almost Never, 2= Sometimes, 3 = Fairly Often and 4 = Very Often.**

**Table 5: Key variables defining stress**

	N	Mean	t	Std. Deviation	CV	Sig. (2-tailed)
Been upset	118	1.66	15.91	1.134	.683	.000
Things Out of control	118	1.71	16.64	1.118	.653	.000
Feel nervous and stressed	117	1.59	15.11	1.138	.716	.000
Not Confident	117	2.14	20.07	1.152	.539	.000
Things not going well	115	1.97	20.73	1.021	.517	.000
Could not cope with things	117	1.76	18.32	1.039	.590	.000
unable to control irritations	118	1.85	18.95	1.059	.573	.000
Not on top of things	116	1.94	18.89	1.106	.570	.000
Angered by things out of my control	115	1.69	16.06	1.127	.668	.000
Feel lots of difficulties	115	1.60	16.89	1.016	.635	.000

*Source: Field Data (2023)*

School club parameters influence stress levels of secondary school students in refugee communities in Uganda. Descriptive statements were presented on a 5-point Likert scale (0 = Never, 1 = Almost Never, 2 = Sometimes, 3 = Fairly Often, 4 = Very Often). Students shared their experience of stress related aspects.

The results in Table 5 show moderately high ranking with respect to students sometimes having stress (mean scores above 2.0) for most of the stress related constructs. A number of significant responses on various stress levels are noted with relatively high t-values and  $p < 0.05$ ). Responses to questions were statistically significant.

The question indicating “how often do you feel nervous and stressed?” Recorded the highest CV value of 0.716, here, student’s responses varied highly on this question. Contrarywise, question “In the last month, how often have you felt that you were not on top of things?” recorded lowest CV (0.570).

As emphasis, findings are in tandem with the qualitative findings.

“To be sincere, our children in this school are often stressed and worry so much about many things. Some children sleep on empty stomachs and food provided at home and school is never enough, so they are always hungry and cannot concentrate in class like other learners. Also, poor shelter like you have observed around the settlement is a big problem and I

remember one time I was teaching, and it threatened to rain, a boy in my class came to me and asked for permission to go home and take care of the bedding because if it rained on them, he would have nowhere to sleep. You can never have all the attention and mind of such a learner”. Teacher KII, Rwamwanja

#### 4.4 Self-Esteem Index

In **objective three**, an inquiry was made into students’ Self-Esteem (Braun & Clarke, 2006) constructs to first track status of their self-esteem levels. Sel-Esteem according to this study referred to an inward experience of how students felt and believed in themselves (Monteiro et al., 2022). The measures include inferior complex, ability to take in criticism, positive thinking, and self-satisfaction.

In the "Mean" row it shows the average scores, thus, the higher one indicates the stronger agreement to positive self-perceptions, and the lower one stands for the opposite. "t" means the t-statistic shows how strong the linkage between self-assessment (X) and average assessment scores (y). The "Std. Deviation" informs us about the level of variability of the responses by comparing more dispersion with the smaller deviation around the mean. The "Sig. (2-tailed)" line shows relationship with a p value < 0.05 usually deemed significant. Thus, such a value suggests a meaningful connection between the variable and the outcome. Which led to the conclusion that self-perception was significant factor in the self-esteem level.

**Table 6: Self-Esteem Variables**

	N	Mean	t	Std. Deviation	CV	Sig. (2-tailed)
Inferior to others	118	.831	8.81	1.0237	1.2326	.000
No worthwhile person	118	2.517	20.94	1.3057	0.5188	.000
sensitive to criticism	118	1.466	12.32	1.2922	0.8814	.000
Feel overall failure	117	.496	6.18	.8673	1.7495	.000
Not positive about yourself	116	2.853	26.34	1.1666	0.4088	.000
Self-acceptance	116	2.672	22.19	1.2973	0.4855	.000
Nervous to speak	117	1.393	11.15	1.3516	0.9702	.000
Self-satisfaction	117	3.068	29.64	1.1198	0.3649	.000
Feel good about self	118	3.161	35.75	.9605	0.3039	.000

*Source: Field Data (2023)*

The findings above present moderate ranking related to self-esteem opined by refugee students by Mean scores above 2.0 for most respondents. Responses given by respondents on

self-esteem were statistically significant the fact that they indicated Comparatively high t and  $p < 0.05$ . Further, variations were highest on whether a student felt like overall failure (CVs 1.750). The majority sometimes felt good about themselves without regular validation from others (3.161). By and large, despite the variations in self-esteem Responses, 50.9% of the responses indicated students had low self-esteem.

#### 4.5 Psychosocial Resilience Situation among Respondents

**Objective three** examined the extent to which school clubs determine psychosocial resilience of secondary level refugee learners. This study acknowledges that whereas some scholars had shown some aspects that make University students psychosocially resilient, limited evidence exists on how psychosocial resilience of refugee learners in Ugandan can be improved through school clubs (Braun & Clarke, 2006; Setiani & MAD, 2022). This section pays close attention to 14 psychosocial resilience issues common among learners, these were used to measure the psychosocial resilience index. The data shows that 53.4% of the students were not psychosocially resilient. In the table below, details of psychosocial resilience constructs have been presented and further discussed in the next paragraph.

**Table 7: Psychosocial Resilience Constructs**

	N	Mean	t	Std. Deviation	CV	Sig. (2-tailed)
I feel hopeless	118	1.153	9.79	1.2785	1.11	.000
Not value own life.	117	.966	8.39	1.2452	1.29	.000
Unable to do better things	118	1.178	10.97	1.1667	0.99	.000
Cannot relate with others easily	117	1.120	10.24	1.1829	1.06	.000
Cannot handle difficulties	115	1.617	13.32	1.3017	0.80	.000
No religious faith.	118	.856	8.54	1.0882	1.27	.000
I'm weaker in life.	115	1.078	10.35	1.1172	1.04	.000
Self-isolation	116	1.103	10.52	1.1297	1.02	.000
Want to bite or beat someone	117	.829	9.54	.9404	1.13	.000
Over drinking alcohol	118	.314	5.47	.6229	1.99	.000
Absent minded	117	1.607	13.66	1.2728	0.79	.000
Feel sad and unhappy	117	1.752	14.82	1.2792	0.73	.000
Angry and arrogant	118	1.025	11.14	.9997	0.97	.000
Abuse others	118	.814	9.47	.9332	1.15	.000

**Source:** Field Data (2023)

Findings above present moderate ranking related to manifestation of Psychosocial Resilience capabilities in among refugee learners in secondary schools in Uganda (mean scores above 1.5

for most of the Psychosocial Resilience descriptions). There were statistically significant differences among students' **Psychosocial Resilience** capabilities (higher t-values,  $p < 0.05$ ). Some students had more Psychosocial Resilience **or lower** capabilities than others.

A statement, "These days I have been over drinking alcohol or eating marijuana or using any other substances" Exhibited the greatest variations ( $CV=1.99$ ). Questions "I usually feel sad and unhappy & want to cry " reported the lowest variations in responses ( $CV=0.73$ ).

"There is a likelihood of anxiety, fear and even stigmatization in the school because of changes in learners' age and body size. Due to school closure, many children have grown both in body size, and height, they are likely to be laughed at by fellow learners and the community, some could even be nicknamed different names that make them loose the morale and end up dropping out of school. Hence Learners would require PSS sessions that encourage them keep positive". A concerned learner in Palorinya revealed during FGDs. Overall, Psychosocial Resilience capabilities among refugee students appeared to be moderate. The responses were fortified by opinions expressed by qualitative insights from FGDs and teachers.

A respondent from Bidibidi mentioned that:

"With the surrounding community, I have noted cases of mental illness, especially among the young people in our age bracket who are in school and now regularly involved in drug and substance abuse."

## **4.6 Testing hypothesis using the Categorical Regression (CatReg), Optimal scaling**

### **4.6.1 Introduction**

At this level a combination of Categorical Regress analysis was used to test these hypotheses earlier stated in chapter 1 (Joffe & Greenland, 1995). Categorical Regression was used to test the independent effect of belonging to school clubs on individual or combined psychosocial wellbeing aspects. These tests were carried out at "95 % level of confidence "and relationship between variables were taken to be significant if their probability values were less than 0.05 ( $p < 0.05$ )" (R. Chen et al., 2022; Sutin et al., 2020). The relationship becomes significant "if probability value was less than 0.05 ( $p < 0.05$ ). The beta coefficients, Correlations, Importance, and Transformation statistics were also crucial in informing conclusions (Mullineaux et al., 2001).

“Decision points to reject or fail to reject the null hypothesis were based on the p-values. Where  $p < 0.05$ , the research rejected the hypotheses and concluded the variables under investigation were significantly related. And where  $p > 0.05$ , the study failed to reject the hypotheses and concluded there was no significant relationship. Interpretations of results and subsequent discussions also considered coefficients of determinations ( $R^2$ ), F-Statistic values and beta values. The  $R^2$  indicated the percentage change of impact, a dependent variable had on the dependent variable (Psychosocial wellbeing). The higher the  $R^2$ , the higher influential impact on the dependent/outcome variable. Further, the higher the F-Statistic the more significant the model was. The negative or positive effect of the independent variable on the dependent was explained by checking the beta ( $\beta$ ) sign. Implying of beta coefficient showed a negative sign then the relation was negative, and the positive beta sign showed positive relationship. The findings are presented in various sections of this chapter along study objectives and corresponding hypotheses” (Emmert-Streib&Dehmer, 2019). For each result obtained it has been discussed in the context of real issues on the ground, literature, and philosophical institutions.

#### **4.6.2 Principal Factor analysis**

To capture maximum variance in the data while reducing dimensionality, Principal Component Analysis (PCA) was executed (Bro &Smilde, 2014). This was a powerful tool that helped to simplify complex ordinal Likert scale by revealing underlying patterns (Beattie &Esmonde-White, 2021).

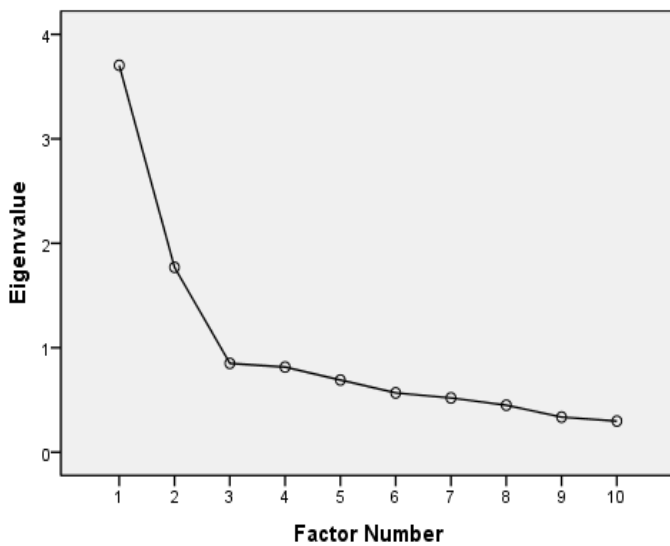
It was this “statistical technique used to reduce the dimensionality of data while retaining most of its variation” (Drikvandi&Lawal, 2023). It facilitated transformation of “the original variables into new set of orthogonal variables called principal components” (Yamasaki & Matsushima, 2022). “These components are linear combinations of the original variables and are ordered by the amount of variance they explain. For each of the Categorical Themes, the Eigenvalue above one (1) was considered and compressed into one variable by computing the mean of all observations whose Eigen value fell above one” (Yamasaki & Matsushima, 2022).

The scree plots below show a graphical representation of the eigenvalues of the categorical factors for each of the outcome themes. These values helped in determining the choice of factors to retain and construct PSYCHOSOCIAL WELL-BEING indicators. In the plots

below the researcher looked for the point on the plot where the slope levels off (the "elbow"), indicating the number of factors to retain. "Factors with eigenvalues greater than 1 were typically retained, the scree plot helped to confirm this decision" (Zhu & Ghodsi, 2006) & (Kanyongo, 2005).

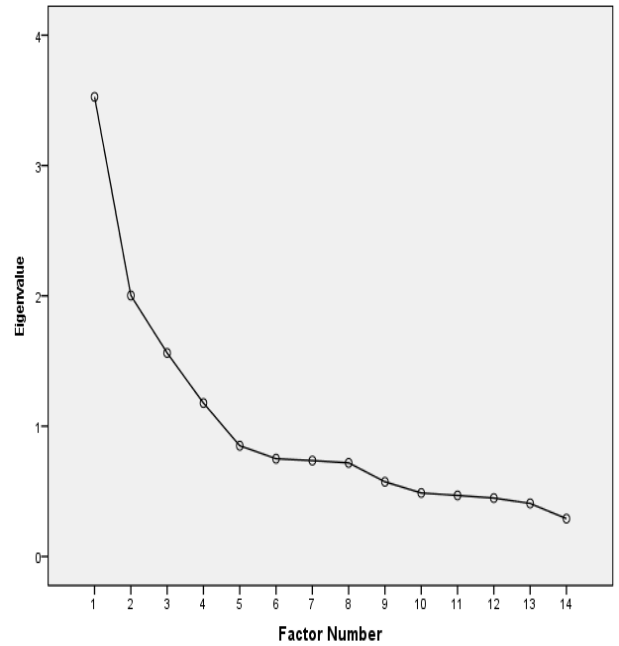
### Stress Levels

Screen Plot for Stress

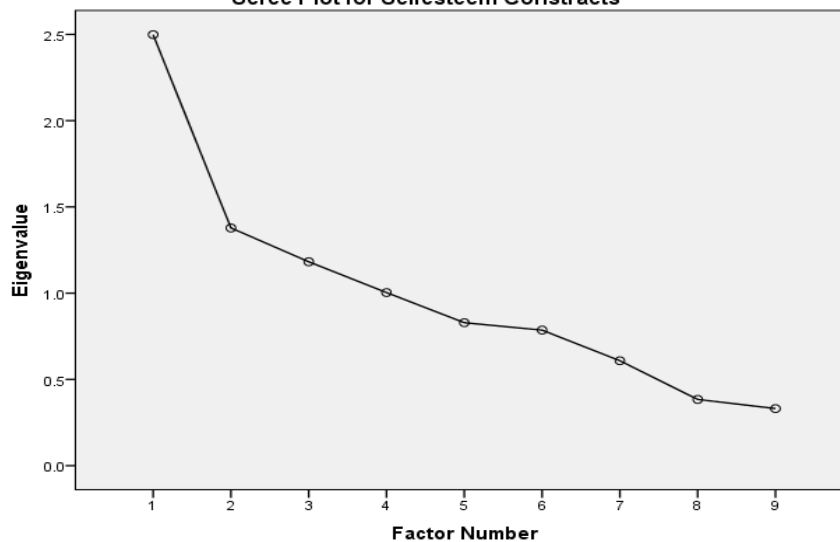


### Psychosocial Resilience index

Scree Plot for Psychosocial Resilience



Scree Plot for Selfesteem Constructs



For stress index, factors 1 and 2 were considered with 3.704 and 1.770 eigenvalues respectively. Also, the factor Matrix between the two variables had higher positive loadings.

For Psychosocial Resilience factors, a total of Four (4) factors were considered ranging from item 1,2,3 & 4. These factors had eigenvalues (3.527, 2.003, 1.562 & 1.177 respectively).

The first three factors were considered for Self-esteem index since their eigenvalues were higher than one (1). See the last scree plot above.

#### **4.6.2.1 Optimal scaling**

Before CATREG (Categorical Regression) Optimal scaling was executed to Transform categorical variables into meaningful order and magnitude and facilitate optimization of relation of Psychosocial wellbeing constructs with independent variables. Transformation of the variables potentially enhanced interpretability and predictive power of the CAT regression model, thereby increasing accuracy of predictions (Albornoz-Arias et al., 2019). See the results in the following sections for each of the models executed.

#### **4.6.2.2 Categorical Regression (CATREG) is Applied**

Interpreting CATREG output for categorical factors in relation to ordinal dependent variable considers coefficient estimates in the output. These estimates suggest a unit change in log odds independent variable led to variation in the dependent, when compared with the reference category. Coefficients that are greater than zero show the rise in the odds of the outcome whereas number coefficients below zero signify a fall in the log odds of the outcome. It was also crucial to look at the significance of independent factors by looking at their respective p-values.  $P < 0.05$  suggests the predictor variable is significantly correlated with the dependent variable(Ares et al., 2023; L. Wang et al., 2022).

CATREG was chosen as a suitable regression for this research because of its versatility and ability to accommodate various types of categorical predictors, including binary, nominal, and ordinal variables. This flexibility enabled the researcher to model complex relationships between categorical predictors and the outcome outcomes, allowing for significant insights into the data(Rousselet et al., 2023).

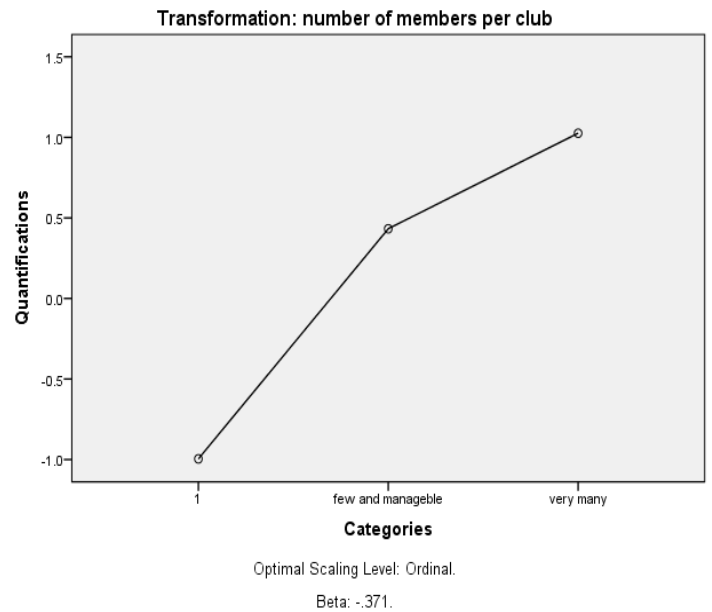
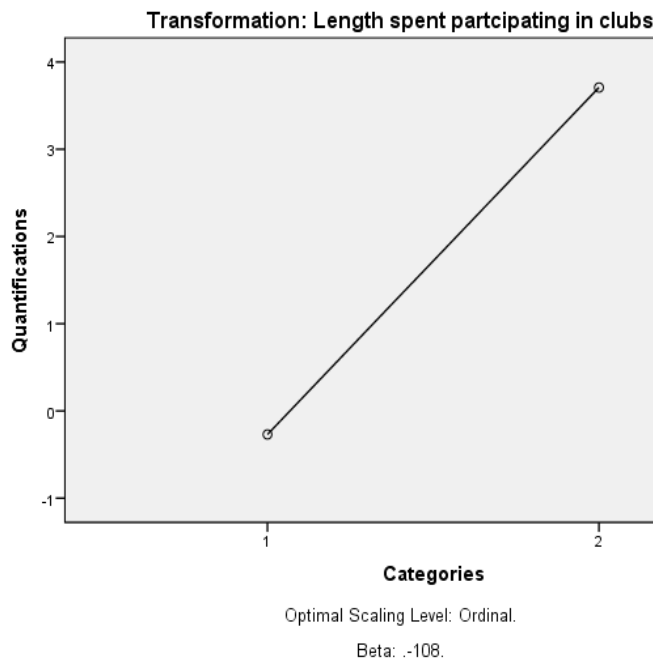
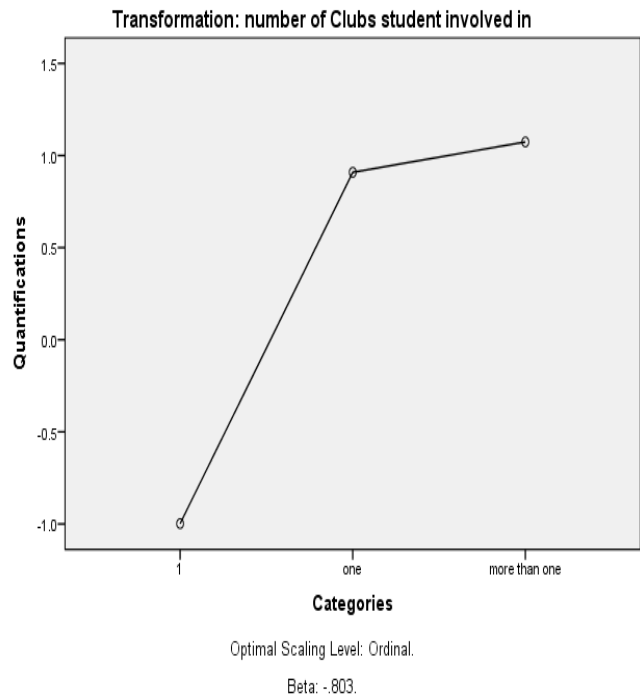
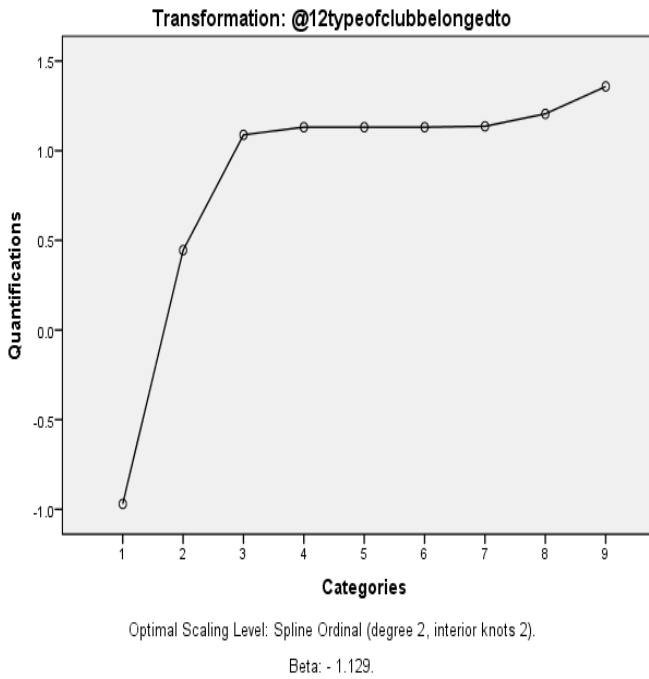
The CATREG model was perfect for studying the relationships between categorical predictors that try to explain outcomes in different research contexts, bringing about flexibility, ease of interpretation, and solid statistical conclusions. It emphasizes the role of handling categorical data thus this makes it a must have research tool for those seeking to unravel the intricate relationships between different variables.

#### **4.6.3 Objective one assessed the relationship between School Club parameters and stress levels among refugee students**

Using stress variables in table 5, a stress score index was computed through Principal Factor Analysis. This facilitated selection of all important stress variables and combined them through mean scores. This was in a bid to test the following hypothesis: ***H0: School club parameters have no influence on stress levels of secondary school students in refugee communities in Uganda.***

Underscoring the fact that many studies show a positive relationship between reducing stress levels and engagement in school level extracurricular activities, these were not linked to refugee situation. The research therefore hypothesized that given the situation refugees live in, participating in school clubs cannot have meaningful impact on their stress levels.

***Optimal scaling of Stress and school club constructs***



According to the optimized results, increase in scale of school club constructs negatively affected levels of stress among refugee students. Detailed presentation of results is given in the table below.

**Table 8: CATREG Model of Relationship between School Club parameters and stress levels among students**

<b>Multiple R</b>	<b>R Square</b>	<b>Adjusted Square</b>	<b>R</b>	<b>Apparent Prediction Error</b>	<b>F</b>	<b>Sig.</b>	
<b>-0.598</b>	0.375	0.311		0.332	1.527	0.016	
Standardized Coefficients							
		<b>Beta</b>	<b>Bootstrap (1000) Estimate of Std. Error</b>	<b>df</b>			
Type of club student		-1.129	0.525	2	4.614	0.006	
Number of Clubs student involved		-0.803	0.58	2	1.914	0.152	
Members per club		-0.371	0.576	2	0.415	0.661	
Length spent in club activities		-0.108	0.05	1	4.717	0.035	
Age		-0.168	0.301	4	0.311	0.87	
settlement		-0.091	0.175	1	0.269	0.605	
sex		-0.168	0.106	1	2.544	0.114	
class		0.261	0.17	1	2.355	0.128	
		<b>Correlations</b>		<b>Importance</b>		<b>Tolerance</b>	
<b>Correlations and Tolerance</b>	<b>Zero-Order</b>	<b>Partial</b>	<b>Part</b>		<b>Before Transformation</b>	<b>After Transformation</b>	
Type of club student	-0.01	-0.25	-0.246	0.129	0.048	0.453	
Number of Clubs student involved	0.052	0.075	0.072	0.474	0.008	0.182	
Members per club	0.062	0.042	0.04	0.259	0.012	0.187	
Length spent in clubs' activities	-0.091	-0.109	-0.105	0.11	0.948	0.947	
Age	-0.047	-0.133	-0.126	0.068	0.56	0.53	
settlement	-0.082	-0.091	-0.086	0.064	0.899	0.769	
sex	-0.107	-0.167	-0.159	0.155	0.888	0.917	
class	0.158	0.229	0.221	0.352	0.716	0.635	
<b>Dependent Variable: Stress level</b>							
<b>Predictors: type of club belonged to, number of Clubs student involved in, number of members per club, Length spent participating in clubs</b>							

Source: Field Data (2023)

Overall, belonging to a school club negatively and significantly determined students' levels of stress ( $r=0.298$ ,  $p$  value = 0.016). The belonging to school clubs explained 37.5% changes in students' level of stress.

Results in Table above show Number of clubs a student was involved in, and length of time spent participating in school club significantly determined levels of stress among students ( $p<0.05$ ).

A correlation matrix is seen in the table which contains the coefficients from a regression analysis of the correlation of several predictors and the independent variable, stress level. These standardized coefficients (Beta values) appropriately indicate not only the strength and sign of the association of each predictor with stress level but also account for including other variables in the model.

This analysis has shown that "Type of club student belonged" was negatively association with stress level ( $\beta = -1.129$ ,  $p = 0.006$ ). It means that participating in some school clubs lowered stress levels of students than others. In addition to the negative association with stress level demonstrated for this variable by "Number of Clubs student involved in" positively correlated with stress levels though not statistically significant ( $\beta = 0.803$ ,  $p = 0.152$ ). Similarly, Number of members per club did not cause a significant influence on stress levels ( $\beta = 0.371$ ,  $p = 0.661$ ).

Nevertheless, it was found that "length of time spent participating in school club activities" significantly predicted reducing levels of stress ( $\beta = -0.108$ ,  $p = 0.035$ ). Meaning students spending more time in school club activities potentially had lower stress level. These results reject the null hypothesis and conclude that *School club parameters have significantly negative influence on stress levels of secondary school students in refugee communities in Uganda*. Other control variables like age, sex and class level of students did not influence stress levels of the students,

#### **Regression Equation 1:**

Stress Level= $\beta_0+(-1.129\times$ Type of club student belongs) $+(-0.108\times$ Time spent participating in clubs) $+C$

- $\beta_0$  represents the constant term (intercept =0.801).
- Type of club student belongs and Length spent participating in clubs were independent variables
- $C$  represents other factors held constant

Results, therefore, agree with (Fares et al., 2016) who suggested that encouraging the participation in extracurriculars promotes positive and healthier behaviors for de-stressing most students. Also agree with (Gottfried, 2021) *who posits that* “Students who did not participate in extracurricular activities always reported significant positive association with academic stress”, and so did (Bakoban and Aljarallah, 2015), who further revealed that student that participated in music, physical exercise, playing sports, socializing without alcohol by joining organizations reported to be less stressed as compared to those who do not”. The argument was further proved by (Furda and Shuleski, 2019) revealing that that “the academic adjustment of students who actively participate in extracurricular activities fared better”. However, to achieve higher results, “the activities should be structured” (Parrott and Cohen, 2019) not just performing at individual level.

This narrative did not directly link with variables of this study such as the type of school and Length of time students spend participating in the clubs. Parrot and Cohen’s focus were more on the group based structured extracurricular activities that tend to have multiple positive results. But the type of club matters in Ugandan refugee context. Other scholars cited potential benefits such as stronger social skills, identity, and greater self-efficacy. (Schaefer et al., 2016). “Not only participation improve social skills through a positive peer context, but also found a higher academic adjustment and improved mental health and emotional well-being” (Guilmette et al., 2019a)&(Nelson-addy, 2017).

While using, Qualitative results more insights on drivers to stress were discussed. Adolescent Learners needed school clubs to provide psychosocial support sessions that encourage them to keep positive. *“There is sometimes anxiety, fear and even stigmatization in the school because of changes in girls’ age and body size. Many children have grown both in body size, and height, they are sometimes laughed at by fellow learners and the community, some are nicknamed different names that make them loose the morale and end up dropping out of school”*, said a refugee student leader.

When such leaners thought of the distance from school to home kept worried and stressed. However, when they moved with some school club members taking similar direction back home, they would feel protected. *“Because we walk long distances to and from school, we feel very unsafe. Some areas along the journey are isolated and we meet several boys or old men, and they threaten and run after us and they are likely to rape us, but we work with some*

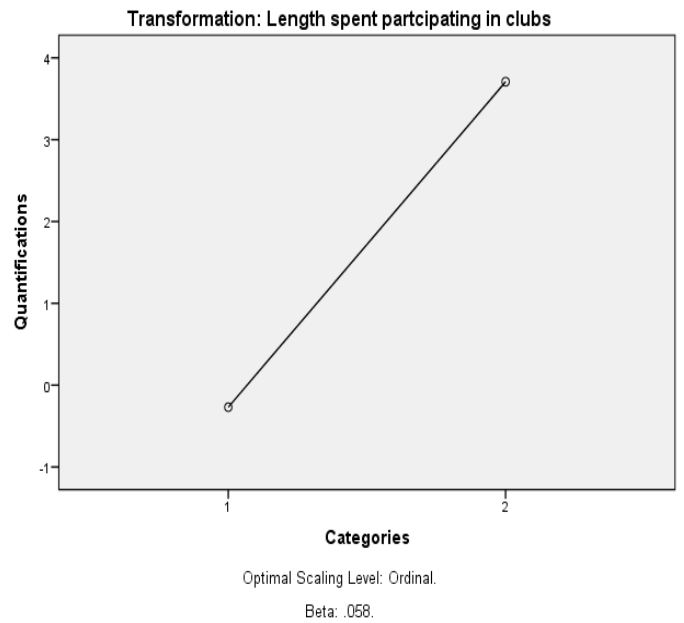
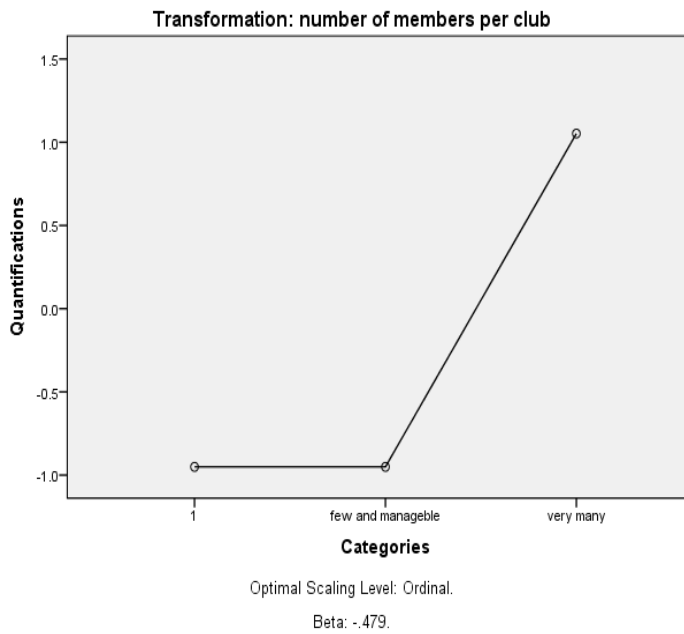
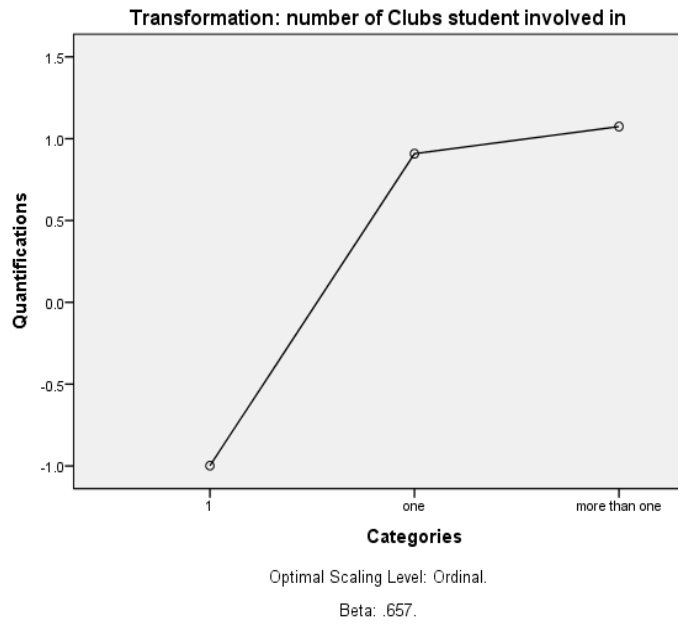
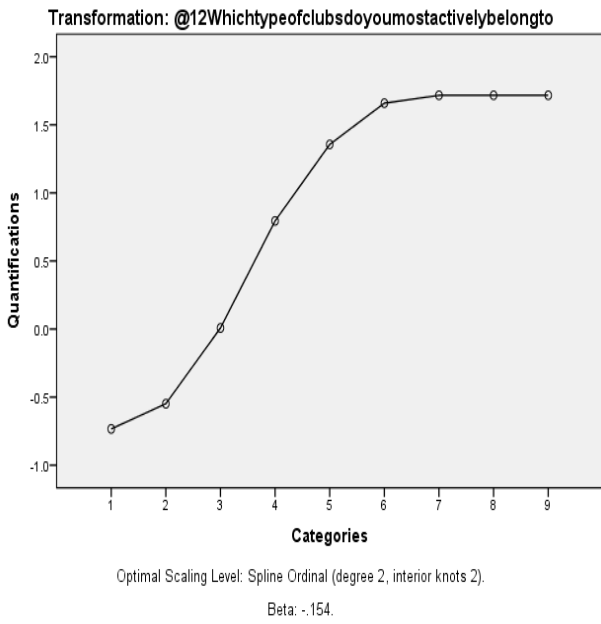
*members in our club we usually feel safe”, a female learner in Bidibidi said. Orphan hood, parental neglect, and ignorance of parents and alcoholism by some parents stressed learners.*

#### **4.6.4 Objective two assessed the influence of participating in School Clubs on refugee students’ Self-Esteem.**

To establish the independent effects of participating in **School Club(s)** and level of **students’ Self-the study** hypothesized that: *H<sub>0</sub>: School club parameters do not influence self-esteem levels of secondary school students in refugee communities in Uganda.* see Table 10 with findings.

The provided model summary showcases the performance metrics of a regression model intended to forecast the dependent variable, Self-Esteem, based on several predictors: The predictor variables included the type of club they belong to, the number of clubs student involved in, the number of members in each club, and the times students spent at each club.

***Optimal scaling of Self-Esteem and School club constructs***



Unit increase in all other optimized independent variables of school club constructs affected self-esteem apart from type of club and number of members per club, that showed a negative relationship.

**Table 9:Independent Effects of Club parameters on Self-Esteem among students**

	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Apparent Prediction Error</b>	<b>df</b>	<b>F</b>	<b>Sig.</b>
	<b>0.41</b>	0.44	0.421	0.356	1.032	0.04
		Standardized Coefficients				
		Beta	Bootstrap (1000) Estimate of Std. Error			
Type of club student belongs		-0.154	0.34	1	0.204	0.653
Number of Clubs student involved		0.657	0.436	2	2.27	0.018
Members per club		-0.479	0.35	1	1.866	0.047
Length spent clubs		0.058	0.091	1	0.403	0.527
Age		0.22	0.279	6	0.618	0.716
settlement		0.356	0.132	1	7.27	0.008
sex		-0.081	0.103	1	0.618	0.434
class		-0.089	0.229	1	0.15	0.7
Dependent Variable: Self-Esteem						
Predictors: type of club belonged to, number of Clubs student involved in, number of members per club, Length spent participating in clubs						

*Source: Field Data (2023)*

The multiple correlation coefficient (Multiple R) equals 0.41, indicates a moderate linear association between the combination of predictors and a dependent variable Self-Esteem.

The model’s coefficient of determination ( $r^2 = 0.44$ ) shows that 44% of the variation of Self-Esteem Scores was explained by Predictor variables. Such a strong correlation among predictors and Self-Esteem can be inferred. However, adjusted  $r^2$  (0.421), suggests addition of more indicators to the model in further research, this would increase its predictive power and attribution of independent variables to Self-esteem.

Since coefficient value for "Type of club student belongs" is negative (-0.154), it can be explained as a negative correlation with Self-Esteem though insignificant ( $p = 0.653$ ).

Regression Beta coefficient of “Number of Clubs Student Involved in” is 0.657 and is positive, hence signifies a relationship between Self-Esteem and the variable ( $p = 0.018$ ) indicates getting involved in more clubs potentially reported greater levels of self-esteem.

The coefficient on "Number of members per club is -0.479, illustrating that when the clubs overly increased number of members, negatively affects Self-Esteem of members. The t coefficient obtained was statistically significant ( $p = 0.047$ ). This indicates that clubs with a higher number of members may be contributing to the lower levels of self-esteem. This is majorly due to reduced active participation when the group is bigger.

The coefficient for "Total length of club participation" was 0.058, suggesting an effect but it was insignificant ( $p = 0.527$ ). however, settlement where refugee learner stayed positively determined the level of esteem ( $p$  value = 0.008)

### ***Regression equation 2***

Self-Esteem= $b_0$  +(0.657×Number of Clubs Student Involved In) +(-0.479×Number of Members per Club) +C

Where:

- $b_0$  represents the intercept,
- C represents other factors held constant.

Unlike the results in this objective, existing scholarly research failed to show a clear pattern emerging as the “best” fit aspect from school clubs that promote self-esteem. For example, (Hee et al., 2018) posits that “students’ participation in extracurricular activities promoted by schools can increase their school level engagement, which leads to the development of more positive attitudes”. This does not show exactly which extracurricular components were influential over the others.

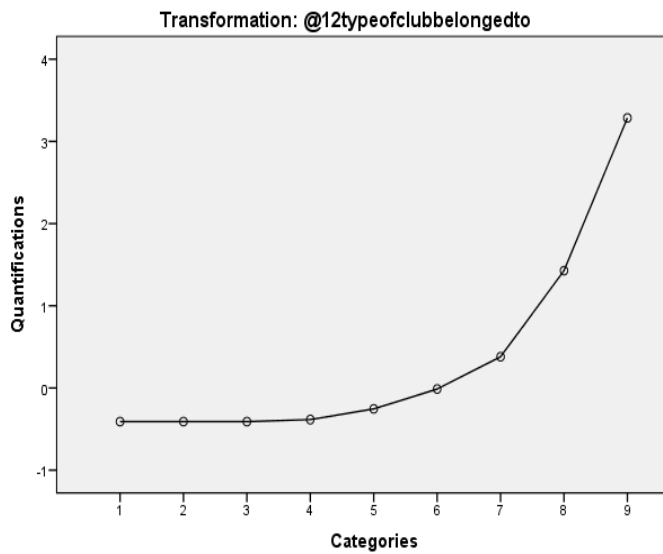
Research by (Ginosyan et al., 2019) found that “participating in extracurricular activities, students develop a sense of belonging that positively contributes to their own identity”. Same applies to study earlier done by (Christison, 2013) which claims that “participation in extracurricular activities contributes to academic achievement and social self-conception”. The same approach was used by (Crumpler, 2019) emphasizing that extracurricular activities though not specific to school clubs improved one’s “self-management skills like perseverance, coping skills, or the ability to adapt to changing situations” originate from one’s ability to socialize. Mostly the findings by many scholars were in the affirmative. However, this study had hypothesized that since refugee students have very challenging history and stay in harsh conditions, school club activities alone did not have a significant influence on self-esteem.

#### **4.6.5 Objective three examined influence of School Club parameters on psychosocial resilience among refugee students**

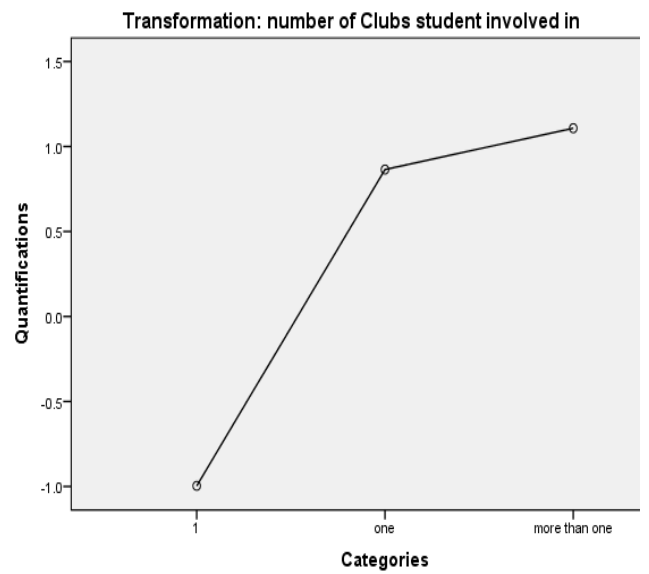
The second objective examined the degree to which SchoolClub parameters influenced psychosocial resilience among refugee students. A corresponding hypothesis assumed that; **H<sub>2</sub>: *There is a negative effect of school club parameters on psychosocial resilience of secondary school students in refugee communities in Uganda.***

This research question was tested on each school club parameter against psychosocial resilience score index. In this analysis of independent effects individual school club parameters on combined psychosocial resilience parameters inform of a score index. Emphasis put on items which appeared significant predictors with p value < 0.05.

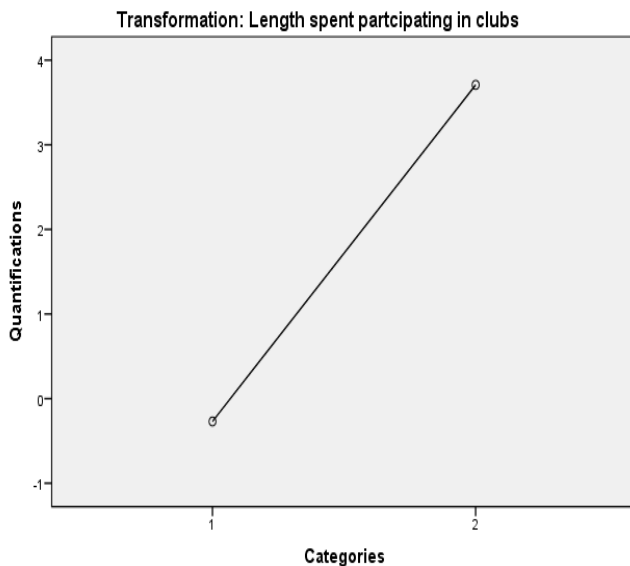
*Optimal scaling of Psychosocial resilience and school club constructs*



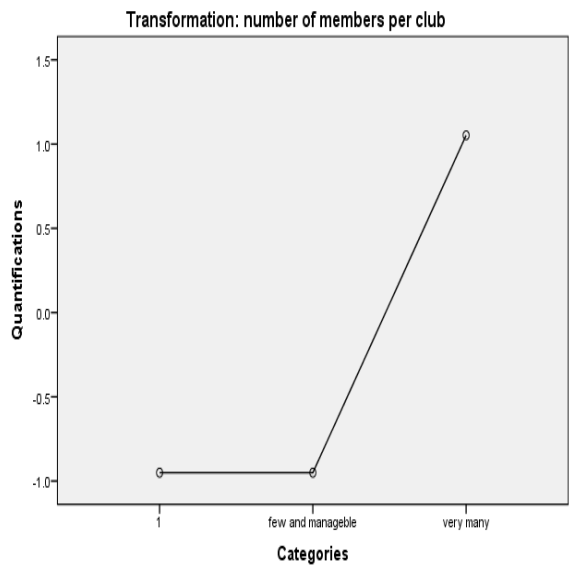
Optimal Scaling Level: Spline Ordinal (degree 2, interior knots 2).  
Beta: -.245.



Optimal Scaling Level: Ordinal.  
Beta: .729.



Optimal Scaling Level: Ordinal.  
Beta: .082.



Optimal Scaling Level: Ordinal.  
Beta: -.553.

Considering the beta coefficients, the optimized results above show mixed results where number of members per school club relation and club type showed negative relationship with the school psychosocial resilience while length spent participation in club activities and number of clubs a student was involved positively related to psychosocial resilience. See details in the table below;

**Table 10: School Club parameters and psychosocial resilience among refugee students**

Multiple R	R Square	Adjusted Square	R	Apparent Prediction Error	df	F	Sig.
<b>0.611</b>	0.397	0.304		0.303		1.986	0.044
Standardized Coefficients							
		Beta		Bootstrap (1000) Estimate of Std. Error			
Type of club student belongs		-0.245		0.204	2	1.435	0.243
Number of Clubs student involved		0.729		0.357	2	4.173	0.018
number of members per club		-0.553		0.367	1	2.266	0.035
Length spent in clubs		0.082		0.091	1	0.812	0.37
Age		-0.168		0.305	4	0.304	0.875
settlement		-0.091		0.174	1	0.271	0.604
sex		-0.168		0.104	1	2.606	0.11
class		0.261		0.175	1	2.224	0.139

*Source: Field Data (2023)*

The calculated value of (R= 0.61) reveals that dependent variables moderately and strongly affected psychosocial resilience. The R Square value (=0.397) claims that approximately 39.7% of change in Psychosocial Resilience level is caused by predictors that have been incorporated in the model.

The value (0.304) in regression provides an adjustment that is based on the number of determiners in the model and thus renders a sounder measurement of the proportion of variation explained. It indicates that the inclusion of further predictors will most probably not result in considerable improvements in the model explainability, since they will not flexibly represent the quantities that affect the model.

The ANOVA results show that the regression model with the mentioned predictors was statistically significant (alpha = 0.05; p = 0.044), thus being able to predict the Psychosocial Resilience level. This observation alone does not give us the information the study needed to see from individual contributions of each variable to the model, looking at single analysis independent variables.

In the coefficients table, the standardized coefficients were generated. Comparing such coefficients facilitated evaluating the effects of each predictor on the response and making sure they are comparable.

The estimate for "Type of club student belong" was no longer significant. The "b" coefficient was equal to -0.150, indicating Psychosocial Resilience level was negatively affected by type of club student belonged to. Nevertheless, heterogeneity coefficient in favor of club affiliation that was not statistically significant ( $p = 0.243$ ) implies that belonging to a particular club could not contribute materially to psychosocial resilience.

A comparison with this, a 0.729 coefficient was found in the factor for number of clubs students participated in. This means that a positive relationship will result in improved Psychosocial Resilience level. In the mentioned coefficient, p value achieved statistical significance ( $p = 0.018$ ), which strongly suggests that participating in a certain number of clubs has significant association with psychosocial resilience.

In the same way, the number for "Members per club" was negatively associated with Psychosocial Resilience ( $\beta = -0.553$ ;  $p = 0.035$ ). This sign means more members per club had a negative impact on Psychosocial Resilience level. A higher number of in-club members association was discovered with lower psychosocial resilience levels.

The last and the least significant term is "The length of time spent in clubs", whose coefficient of 0.082 is suggestive of a positive association with the level of Psychosocial Resilience. On the other hand, the length coefficient of such clubs' participation was not significant ( $p = 0.370$ ) therefore may not induce a great impact on psychosocial resilience. These findings are statistically valid, and they could be replicated. Overall, the research concludes *school club parameters and psychosocial resilience of secondary school students in refugee communities in Uganda are positively associated.*

### **Regression equation 3**

Psychosocial Resilience level =  $b_0 + (0.729 \times \text{Number of Clubs student involved in}) + (-0.553 \times \text{Number of members per club}) + C$

Where:

- $b_0$  represents the intercept,
- C represents other factors held constant.

In a study by (Mupenzi, 2016), agrees that "when the group is bigger, people are not able to express themselves and communicate freely which leave them feeling powerless and disadvantaged". Yet being able to communicate is crucial for refugee students

(Pratiwi&Cahyono, 2020). The two scholars disagree that school clubs can have positive psychosocial resilience impact on students. They argue that School clubs instead have been identified as language barrier breakers since they bring together students from different backgrounds and cultures thus creating resilience among them. They further revealed that Racism and discrimination are some of the parameters that impede young refugee students' resilience (Gyan and Chireh, 2023) in school clubs.

These results therefore expound and close knowledge of previous scholars and reveal that school club parameters such as number of members in a club and number of clubs a student participates in have significant impact on psychosocial resilience. This finding strongly agrees with (Farahani et al., 2018b)&(Nicholls et al., 2021)suggesting that School clubs are essential in breaking trauma story, negative stereotyping among students in secondary schools. Therefore, to cause significant effect on students' self confidence and eventually improve resilience, they need to be engaged in school clubs. When teens feel lonely, isolated, they are more likely to encounter setbacks that affect their optimism. Students should engage with the school and community by volunteering at events or participating in school musical groups.

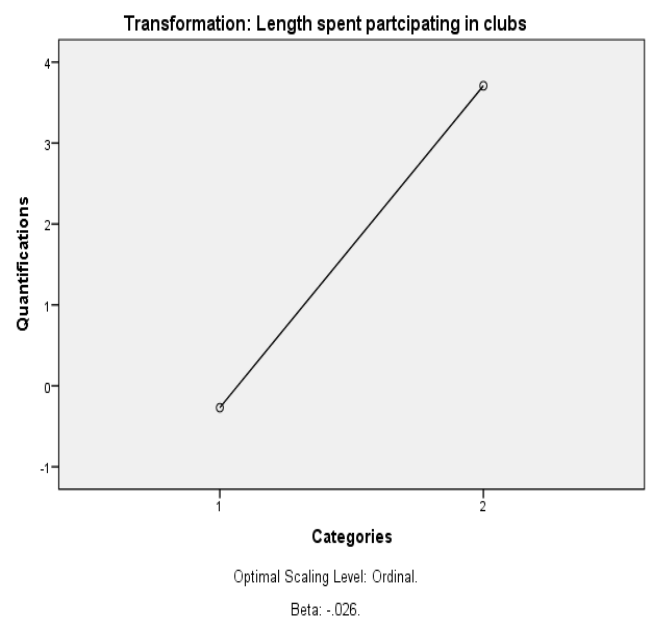
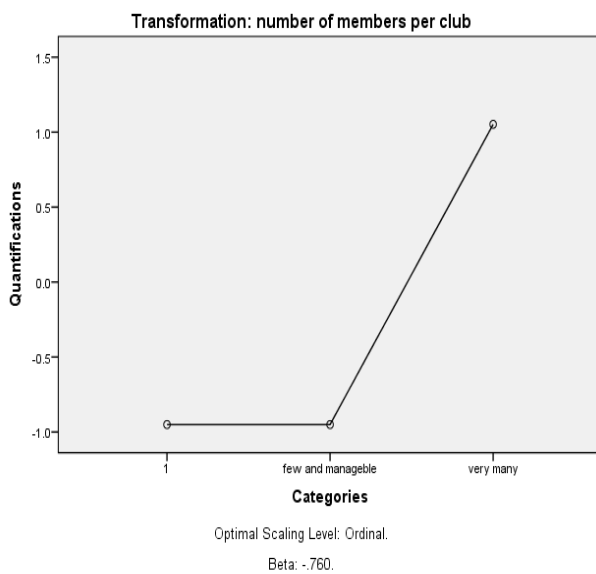
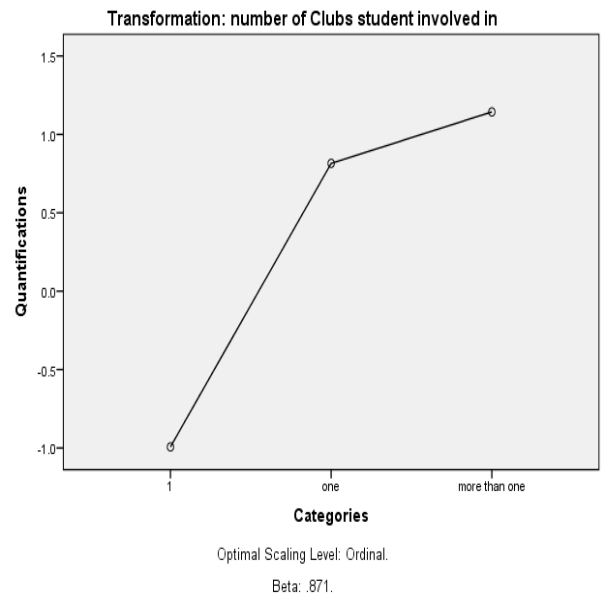
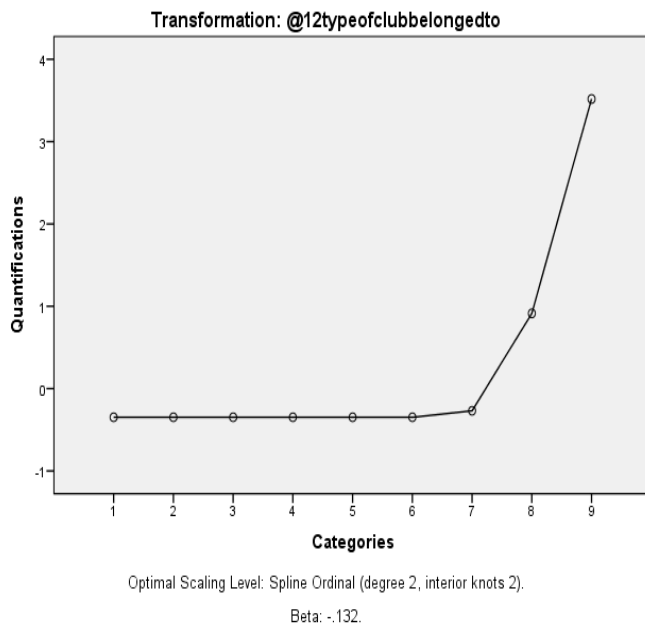
In refugee context, there are several reasons why refugee students need to improve psychosocial resilience. Qualitative findings indicate that learners experienced several issues that required to build their need psychosocial resilience. The results in this study help learners to build resilience and overcome such as Sexual harassment like rape, hunger and lack of food, Child mistreatment like beating and child labour.

Develop a monitoring and esteem identification Needs Framework to help continuous monitoring and identification of low self-esteem issues. Self-esteem training should be integrated in all club activities through collaboration with other actors to design an integrated esteem Response need for refugee students in secondary schools.

**4.6.6 Objective four evaluated the Combined effect of school club parameters on psychosocial wellbeing of secondary school going refugee students in Uganda.**

In a report by *UNICEF (2021)* revealed that the psychological impact of an acute and protracted Covid-19 lockdown hindered youths’ ability to keep in school, kept uncertain and anxious as they reduced social contact. This research was therefore timely to discover whether increased social activities, especially after Covid-19 lockdown characterised by most school clubs clearly demonstrate significant impact on psychosocial well-being in General. The table below is used to discuss the findings in general, hypothesizing that *H<sub>3</sub>: School club parameters have no influence on a combination of psychosocial wellbeing parameters of students in the refugee communities in Uganda.*

**Optimal scaling of Psychosocial wellbeing and School club constructs**



The number of members is a school club positively correlated with psychosocial wellbeing outcomes according to the optimized results above. See details in the table below.

**Table 11: Independent Effects of Club parameters on combined psychosocial wellbeing parameters**

Multiple R	R Square	Adjusted R Square	Apparent Prediction Error	df	F	Sig.
0.501	0.35	0.25	0.31		2.227	0.046
Standardized Coefficients						
		Beta	Bootstrap (1000) Estimate of Std. Error			
Type of club		-0.132	0.299	1	0.193	0.661
Number of Clubs involved in		0.871	0.417	2	4.361	0.015
Members per club		-0.76	0.325	1	5.46	0.021
Length spent in clubs		-0.026	0.089	1	0.085	0.771
Age		0.127	0.292	3	0.19	0.903
settlement		-0.225	0.148	3	2.325	0.079
sex		-0.158	0.105	1	2.275	0.135
class		0.135	0.209	1	0.417	0.52

Correlations and Tolerance						
	Correlations		Importance Part	After Transformation	Tolerance	
	Zero-Order	Partial			Before Transformation	
Type of club	-0.058	-0.128	-	0.084	0.871	0.453
number of Clubs involved in	0.105	0.287	0.123	1.013	0.108	0.182
Members per club	0.014	-0.256	-	-0.122	0.111	0.187
Length spent in clubs	-0.028	-0.026	0.253	0.008	0.951	0.947
Age	0.188	0.124	0.113	0.124	0.781	0.567
settlement	-0.294	-0.22	-	0.343	0.813	0.777
sex	-0.074	-0.165	0.203	0.06	0.906	0.918

Dependent Variable: Psychosocial wellbeing

Predictors: type of club belonged to, number of Clubs student involved in, number of members per club, Length spent participating in clubs

Source: Field Data (2023)

The provided model summary offers an overview of a regression model designed to predict the dependent variable, Psychosocial (PSS) wellbeing level and predictors: “The kinds of club the student subscribes to”, “number of clubs the student attends”, “members in each school club” and the period of time the student spends in each club are the metrics used to assess the overall participation of a student in the school clubs.

The correlation between the multiple predictors with the independent variable, Psychosocial (PSS) Well-being, is 0.501. Accordingly, the linear relationship is moderate, implying further research.

Beyond the benefit of predicting Psychosocial (PSS) wellbeing level of scores, for  $r^2=0.35$  means that 35% change in the scores of Psychosocial (PSS) wellbeing was influenced by predictor variables. Thus, it reflects a strong connection between the important predictors and the PSWS level (Psychosocial wellbeing).

In addition, the adjusted R-square of 0.25 which implies the new variables could improve the model's explanatory power, of which other variables are likely to have already grasped the effects.

The current error of apprehension is 0.31 which indicates the average variation that occurs while predicting the PSS wellbeing. A lower value does mean that this model has a good level of accuracy and wellbeing prediction which indicates that this model can match the reality related to the topic of psychosocial wellbeing.

The ANOVA results suggest that the regression model, including the predictors Type of school club student belongs to, number of Clubs student involved in, number of members per school club, and Time Length spent participating in school clubs, has a statistically significant overall effect in explaining the variation in PSS wellbeing scores.

The coefficient for "Number of Clubs Student involved in " is 0.871, which demonstrates a positive relationship between Clubs Student involvement and the overall level of Psychosocial well-being. Coefficient is statistically significant ( $p=0.015$ ), showing that students involved in the greater number of clubs had higher psychosocial well-being level.

Number of Clubs Student involved in demonstrates a positive relationship with Psychosocial well-being ( $p=0.015$ ). The coefficient for the variable Number of members per club is -0.76 is negative hence showing the negative relation with the level of Psychosocial well-being. Its

statistical value ( $p = 0.021$ ) backs this up, meaning that a greater number of members per club tends to be accompanied by the declining level of psychosocial well-being.

Therefore, School club parameters have significant influence on a combination of psychosocial wellbeing aspects of students in the refugee communities in Uganda. However, only two school club constructs considered in this study had significant effect. These are displayed in the equation below.

***Regression Equation 4:***

$$\text{Psychosocial Well-being Level} = b_0 + (0.871 \times \text{Number of Clubs Student Involved In}) + (-0.76 \times \text{Number of Members per Club}) + C$$

Where:

- $b_0$  represents the intercept,
- $C$  represents other factors held constant.

Results seem to agree with statistical assertions already made by (Stefani, Patron and Rizzuto, (Stefani et al., 2015) citing that psychosocial resilience originates from participating in clubs and this can become vital in promoting reliance and wellbeing among youths.

The results disagree with (Amini & Moses, 2018) who postulated that Club patrons in form of teachers play a very big role in form of psychosocial support if the general Psychosocial wellbeing is to improve. However, results from this study prove that regardless of the teachers' involvement, time and number of clubs and members per club directly influenced psychosocial outcomes. Therefore, other studies need to look at additional factors that improve predictability of the model.

The results are in tandem with (Subramanian & Kokila, 2019) who earlier cited that School clubs provide opportunities for student's involvement in activities that improve well-being. They also get access to platforms for developing mental resilience when participating in club activities. The club activities promote practice, discipline, organization, and teamwork.

However, the results in this study clearly indicate that it mattered less for the size of each club and the number of clubs a student participates in. Keeping students in impactful clubs for longer time should be prioritized. The results of this study, however, did not measure exactly which club(s) were more significantly impactful than the other. Further research can digest this further and close this gap. Existing literature proved that poor Psychosocial Wellbeing had dire effects on students' education achievements (Hillel, 2023). According to teachers in Ugandan refugee context "The victims eventually tend to drop out of school and become a burden to the community, the clubs therefore support in rehabilitating psychosocially challenges learners".

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

As shown in preceding chapters, the study had four objectives and four hypotheses. Previous sections presented each of the findings for research hypotheses which showed mixed findings. In this section the summary is provided based on the study objectives. The section summarises key findings, points out agreements and contradictions among key results of this study and those found by other researchers.

During analysis, several emerging issues were discovered. These issues had a far-reaching effect on the psychological wellbeing of learners beyond school clubs. Hence the focus for this section also digs deep into another enabling environment for Psychosocial Wellbeing of refugee students.

##### **5.1.1 Object one: Effect of School clubs on Students' Stress levels**

The objective one assessed whether school club parameters influence stress levels of secondary school students in refugee communities in Uganda and found that that increasing scale of school club constructs negatively affected levels of stress among refugee students. This study concludes that students that were involved in numerous clubs and had spent more time participating in school clubs significantly had lower levels of stress.

##### **5.1.2 Objective two: Effect of School clubs on Self-esteem levels**

Objective two assessed the extent to which school club parameters influence self-esteem levels of secondary school students in refugee communities in Uganda and found that having more than 34 members per club was negatively related to low Self-Esteem of students. Subscribing to more than one club substantially increased levels of self-esteem. This study concludes that that while the number of clubs students engage in was a ground for improving their self-esteem, the increase of the number of club participants may affect them adversely. Students who serve in multiple numbers of clubs gain self-esteem to the heights.

### **5.1.3 Objective Three: Effect of School Club on Psychosocial Resilience**

Objective three assessed level of effect of participation in school club on psychosocial resilience of secondary school students in refugee communities in Uganda and found that participating in more clubs has a significant positive association with psychosocial resilience. The study concluded that the more members in a school club, the lower the psychosocial resilience. Students that participate in many clubs gain stronger psychosocial resilience capabilities.

### **5.1.4 Objective four: School clubs and combined psychosocial wellbeing parameters.**

Objective four assessed how school club parameters affect combined psychosocial wellbeing parameters and found that type of school club student belongs to, number of Clubs student involved in, number of members per school club, and Length spent participating in school clubs, has a significant effect on PSS wellbeing scores.

## **5.2 Recommendations**

In **objective one** the study found that increasing scale participation in school clubs negatively affected levels of stress among refugee students. Refugee schools should ensure there is more time allocated to school club activities where refugee learners can participate to reduce stress levels.

In **objective two** the study found that having more than 34 members per club was negatively related to low Self-Esteem of students. Schools should encourage students in refugee communities to actively participate in multiple school clubs. The study recommends that schools should prioritize school clubs while minding about the effect club size. Self-esteem training should be integrated in all club activities through collaboration with other actors to design an integrated esteem Response need for refugee students in secondary schools.

**Objective three** found that participating in more clubs has a significant positive association with psychosocial resilience. The study recommends that schools in refugee communities should promote participation in more than one clubs to enhance students' psychosocial resilience and should limit the size of each club to less than 34 members.

In **objective four** the study found that, found that type of school club student belongs to, number of Clubs student involved in, number of members per school club, and Length spent participating in school clubs, has a significant effect on PSS wellbeing scores. This study recommends that there is need for tailored interventions to optimize psychosocial well-being outcomes in school clubs.

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# APPENDICES

## Appendix 1: Secondary School learners' Questionnaire

### Introduction and Consent

Hello; my name is .....and a student at Uganda Martyrs University Nkozi, I am happy to be here with you today. I would like to interact with you for a few minutes about your life and things around you in relation to your education particularly school clubs. Please, note that this information will help shall be used purely for academic purses. We will not record your name anywhere, and you will not be reported as an individual. If I ask a question and it is hard for you, please tell me to simplify it for you and we continue. Should we begin?

1YES 2No if no end

### A) Social Demographic Characteristics

#### 1) Settlement

1. Bidibidi
2. Rwamwanja

2) Name of school: \_\_\_\_\_

Rwamwanja	Bidibidi	Palorinya	Kyaka
1. Rwamwanja SS 2. Ntenungi SS	1) Valley View SS 2) Yoyo SS 3) Nipata SS 4) Ariwa SS 5) Yangani SS 6) Highland SS yumbe		7)

3.Sex of respondent	4.Age of respondent in single years	5.Class	6.Nationality
1. Male 2. Female	.....	1. S1 2. S2 3. S3 4. S4 5. S5 6. S6	1.National 2. Refugee

7.What is your Marital Status?

- 1) Married
- 2) Not married

8. Do you have any children of your own? (Children may be living elsewhere)

- 1) Yes
- 2) No

**B) School Club Parameters**

9. Do you belong to any students' club in this school?

- 1) Yes
- 2) No

10. If yes, how many students' clubs are you involved in?

.....

11. On average how many members are you in a club(s) you are involved in?

.....

12. Which type of club(s) do you most actively belong to?

- a) Peace
- b) Child rights
- c) Environment
- d) Debate
- e) MDD
- f) Girl empowerment
- g) Entrepreneurship
- h) Others (specify)

13. Ever since you started school how long (in years) have you spent participating in school clubs?

.....

**C) Psychosocial Wellbeing**

**I want to hear from you – what your life is like.**

Some people like you tell us that they have noticed ways in which they are different in how they are and what they feel and think, compared to how they were before joining school clubs. How about you?

Let's talk about some more specific questions about changes.

**14) STRESS INDEX**

**0 = Never 1 = Almost Never 2 = Sometimes 3 = Fairly Often 4 = Very Often**

1) In the last month, how often have you been upset because of something that	0	1	2	3	4
---	---	---	---	---	---

happened unexpectedly?					
2) In the last month, how often have you felt that you were unable to control the important things in your life?					
3) In the last month, how often have you felt nervous and “stressed”?					
4) In the last month, how often have you felt confident about your ability to handle your personal problems?					
5) In the last month, how often have you felt that things were going your way?					
6) In the last month, how often have you found that you could not cope with all the things that you had to do?					
7) In the last month, how often have you been able to control irritations in your life?					
8) In the last month, how often have you felt that you were on top of things?					
9) In the last month, how often have you been angered because of things that were outside of your control?					
10) In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?					

Source: *Global measure of perceived stress<sup>i</sup> and The Social Psychology of Health<sup>ii</sup>*

### 15) PSYCHOSOCIAL RESILIENCE

Question	0 Strongly Disagree	1 Disagree	2 Not sure	3 agree	4 Strongly agree
1) I feel hopeless these days					
2) I do not have a greater appreciation for the value of my own life.					
3) I am not able to do better things with my life now					
4) I cannot relate with others easily					
5) I cannot handle difficulties					
6) I do not have a stronger religious faith.					
7) I discovered that I’m weaker in life.					
8) These days I always want to be alone (self-isolation)					
9) Sometimes I always feel like I want to bite or beat someone					
10) These days I have been over drinking alcohol or eating marijuana or using any other substances					

<b>11)</b> I usually find myself absent minded					
<b>12)</b> I usually feel sad and unhappy & want to cry					
<b>13)</b> I usually get angry and become arrogant					
<b>14)</b> I find myself abusing those around me any time					

*Source: Posttraumatic Growth Inventory (PTGI)<sup>iii</sup>*

**16) Self-esteem index**

<b>Esteem Items</b>	<b>Response</b>				
	No, never	Yes, but not often	Yes, sometimes	Yes, often	Yes, always
1. Do you believe you are inferior to others in some way?					
2. Do you believe you are a worthwhile person?					
3. Are you sensitive to criticism?					
4. Do you feel like an overall failure?					
5. Often think positively about yourself?					
6. Do you like and accept yourself even when you are rejected by others?					
7. Do you get nervous when called upon to speak to a group of people you don't know?					
8. Are you satisfied with who you are?					
9. Do you feel good about yourself without regular validation from others?					

*Source: Self-esteem index<sup>iv</sup>*

**Thank you**

**End**

## **Appendix 2: Key Informant and Focus Group Discussion Guide**

### **Introduction and Consent**

Hello; my name is .....and a student at Uganda Martyrs University Nkozi, I am happy to be here with you today. I would like to interact with you for a few minutes about your life and things around you in relation to your education particularly school clubs and Your Psychosocial Wellbeing. Please, note that this information will help shall be used purely for academic purses. We will not record your name anywhere, and you will not be reported as an individual. If I ask a question and it is hard for you, please tell me to simplify it for you and we continue. Should we begin? 1YES 2No☐ to the end

*Let's talk about school clubs where you belong in this school.*

- 1) What is the most cherished students' club in your school, and why?
- 2) What psychosocial challenges do students face in your school?
- 3) How are school clubs benefiting students to overcome Psychosocial challenges?
- 4) Worthwhile

Thank you.

End

### Appendix 3: Work Plan

Activity	Feb – Mar 2023	April 2023	May 2023	May 2022	Jun 2023	July to October	
Proposal Writing							
Proposal Submission							
Proposal marking							
Making of corrections							
Data Collection and analysis							
Report Writing							
Submission of Final report							

## Appendix 4: Research budget

The budget for the study was Uganda Shillings 3,600,000. The breakdown of this was as follows

ACTIVITY/ITEM	TOTAL AMOUNT (UGX)
<b>CHAPTER ONE</b>	
Stationery, printing and photocopying	100,000
Transport costs (Fuel)	100,000
Airtime	50,000
<b>CHAPTER TWO</b>	
Printing & photocopying	100,000
Airtime	50,000
Transport (Fuel)	100,000
<b>CHAPTER THREE</b>	
Printing and Binding	100,000
Airtime	50,000
Transport (Fuel)	100,000
<b>CHAPTER FOUR</b>	
Data collection, Entry, Editing and Analysis	1,600,000
Printing and binding	100,000
Airtime	50,000
Transport (Fuel)	100,000
<b>CHAPTER FIVE</b>	
Discussion and interpretation of findings	450,000
Dissertation printing and Binding	200,000
Airtime	50,000
Transport (Fuel)	100,000
Miscellaneous	200,000
<b>Total</b>	<b>3,600,000</b>

<sup>i</sup> Cohen, S., Kamarck, T., and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24, 386-396.

<sup>ii</sup> Cohen, S. and Williamson, G. Perceived Stress in a Probability Sample of the United States. Spacapan, S. and Oskamp, S. (Eds.) *The Social Psychology of Health*. Newbury Park, CA: Sage, 1988.

<sup>iii</sup> Tedeschi and Calhoun (1996); Posttraumatic Growth Inventory (PTGI)

<sup>iv</sup> JIM FOLK <https://www.anxietycentre.com/tests/self-esteem-test/> (2023)