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# MEMORY HEALTH PROMOTION: THE PERCEIVED IMPACT OF MEMORY ASSOCIATION ON SOCIAL SUPPORT OF MIDDLE AGE WOMEN IN FINLAND

A Case Study: Kouvola Memory Association

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<b>Tiivistelmä</b> <p>Suomessa vuosittain melko suuri määrä ihmisistä kärsii muistisairauksista. Tilanne on johtanut siihen, että suuria rahasummia käytetään muistisairauksien hoitoon. Kouvola muisti yhdistyksen projekti, kansalaisjärjestön sekä Suomen sosiaali- ja terveysministeriön yhteistyöaloite, tähtää Kouvola ja Kotkan seudun naisten muistin hyvinvoinnin parantamiseen. Projekti on ennaltaehkäisevä toimenpide ikääntyneiden ihmisten muistisairauksien vähentämiseksi Suomessa. Tutkimusaineston keräämisen aikana järjestön toimintaan osallistuvien naisten kokonaismäärä oli 297.</p> <p>Koko tutkimusprosessissa käytettiin kvalitatiivisen tapaustutkimuksen lähestymistapaa. Tutkimuksen teemaan, sosiaaliseen tukeen, perustuvaa temaattista koodausta ja analyysiä käytettiin apuna vastaamaan tämän empiirisen tutkimuksen tutkimuskysymyksiin. Tämän empiirisen tutkimuksen havainnot osoittavat, että neljä (4) viidestä (5) erityyppisistä sosiaalisista tuista, lähteestä Sarason et al. (1990), ovat saatavilla naisille, jotka osallistuvat Kouvola muisti yhdistyksen toimintaan. Myös yhdistyksen toiminnan vaikutus sosiaaliseen tukeen on koettu positiivisena.</p> <p>Tutkimuksessa suositellaan miesten sisällyttämistä Kouvola muisti yhdistyksen toimintaan, koska muistisairaudet eivät koske ainoastaan naisia. On tarpeen suorittaa lisätutkimuksia, mikä edistää luottamusta jäsenten keskuudessa muisti yhdistyksessä.</p>		
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<p><b>Abstract</b></p> <p>There is a significant number of people affected with memory diseases yearly in Finland. This situation has resulted in putting huge sums of money into treatment of memory diseases. The Kouvola Memory Association project, a collaborative initiative between the nongovernmental organization and the Ministry of Social Affairs and Health, Finland, is aimed at promoting the memory well-being of women in the Kouvola and Kotka regions of Finland. The project is a preventative measure to reduce the rate of memory diseases among the elderly people in Finland. At the time of gathering the research data, the total number of women participating in the association's activities stood at 297.</p> <p>The study adopted a qualitative case study approach in the whole research process. To help answer the research questions aligned this empirical study, thematic coding and analysis based on the research theme; social support, were used. The findings in this empirical study shows that, four (4) out of the five (5) kinds of social support taken from Sarason et al (1990) are available to women participating in the Kouvola Memory Association. Also, the perceived impact of the association's activities on social support is positive.</p> <p>The study recommends the inclusion of men in the activities of the Kouvola Memory Association since memory diseases or illnesses are not limited to women only. There is the need to conduct a further research in what promotes trust among members in memory association.</p>		
<p><b>Keywords</b></p> <p>Memory health, social support, perceived impact, memory association</p>		

## CONTENTS

1	INTRODUCTION .....	6
1.1	Aims and objectives of the study .....	7
1.2	Statement of problem .....	7
1.3	Research questions .....	8
2	backgroundofthestudy .....	9
2.1	A brief introduction of Kouvola memory association .....	9
2.2	Kouvola Memory Association activities and partners .....	9
3	CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW .....	10
3.1	Definition of memory and memory diseases .....	10
3.2	Functions of the human memory and risks factors .....	11
3.2.1	Old age and genetic make-up .....	12
3.2.2	High cholesterol .....	13
3.2.3	Smoking .....	13
3.2.4	High blood pressure .....	14
3.2.5	Diabetes .....	14
3.2.6	Obesity and lack of physical activity .....	15
3.2.7	Alcohol .....	16
3.2.8	Low levels of formal education .....	16
3.2.9	Depression .....	17
3.2.10	Social network .....	17
3.3	Statistical information on memory disease prevalence in Finland .....	18
3.4	Midlife social interaction and reducing risks of memory related diseases .....	19
4	THEORETICAL FRAMEWORKS .....	20
4.1	Health belief model .....	20
4.2	Social support theory .....	21
4.3	HBM and Social Support as theoretical framework .....	25
5	RESEARCH METHODOLOGY .....	26
5.1	Qualitative research methodology .....	26
5.2	Kouvola memory association as a case study .....	27

5.3 Face-to-face interview .....	28
5.4 Ethics of data gathering and analysis .....	29
5.5 Validity and limitations of the study .....	30
5.6 Method of data analyses .....	31
6 RESULTS .....	33
6.1 Demography of respondents .....	33
6.2 Kind(s) of social support .....	34
6.3 Emotional support .....	34
6.4 Social integration / network support .....	35
6.5 Esteem support .....	36
6.6 Tangible aid .....	37
6.7 Informational support .....	38
6.8 Perceived memory association impact on social support .....	39
7 CONCLUSIONS .....	41
7.1 Policy implications .....	43
7.2 Recommendations .....	44
REFERENCES .....	46
APPENDICES	
Appendix 1.Interview Questions	
Appendix 2.Sample Data Analysis	

## 1 INTRODUCTION

A common health related issue that has been found among the ageing population across the world over is the ability to recall past events (Help Guide 2013). Many adults tend to forget their way to their home and even more seriously, can remember what send them to a place in most situations (ibid). All the situations pointed above are related to what is termed as memory loss (ibid). Memory loss aside the frustrations caused to those affected, it has other implications on quality health delivery, social and economic impact looking at budgetary allocated to its treatment (Ministry of social affairs and health, Finland 2013).

The European parliament in the year 2008 having noticed the ever increasing incidence of memory disorder adopted a written declaration urging member states to take action to counter the menace affecting a greater number of people within the European Union. Finland, member of the European Union has not been exempted from the menace of memory disorder among it's populates decided to take action under the European Union declaration. In Finland, the estimated number of people who are diagnosed with demotion according to the Finnish Ministry of Social Affairs and Health (2013) is 1300. This number is higher when compared with the national average of European Union member states (ibid).

A Nation Memory Programme spanning for eight years dubbed "Creating a memory-friendly Finland" was launched to help reduce the prevalence of memory disorders such as Alzheimer's and dementia. Under the "National Memory Programme 2012-2020", the Finnish Ministry of Social Affairs and Health together with major stakeholders in the health and social sector have come up with plans and activities to achieve the goal which is "a memory friendly Finland". It was through this objective that the Kouvola Memory Association (Kouvola Muisti Yhdistys) suggested the idea to help women who for one reason or the other are prone to developing dementia in later life. Kouvola Memory Association (Kouvola Muisti Yhdistys) under the National Memory Programme 2012-2020 is working with women in two regions which are; Kouvola and Kotka in the south-eastern Finland.

This empirical study using qualitative case study research approach was designed to investigate the kind(s) of social support and the impact of the Kouvola Memory Association on social support of the participants of the project based on their perceptions. Findings from this study will contribute to research works conducted in an effort to helping the National Memory Programme 2012-2020 realize its set objectives which are; to promote brain health, to prevent memory disorders, to detect memory problems as early as possible and, to develop a system that ensures that treatment, rehabilitation. The study, most importantly, will provide relevant information to the project supervisors as to what needs to be given a second thought in moving forward with the project.

### 1.1 Aims and objectives of the study

There are countless number of studies and practical approaches in an attempt to solve the memory loss especially among the elderly in our societies today (Krucik 2013; Fratiglioni et al. 2004; Alzheimer Society of Canada 2015). While there have been many attributions to memory loss occurrences as a result of ageing (Alzheimer Society of Canada 2015), many studies have come up with a well-defined way to deal with the above mentioned health problem (Alzheimer Society of Canada 2015; Qiu, Winblad, & Fratiglioni, 2005; Launer et al. 2000,). This empirical study aims at enriching the ongoing debate on memory loss prevention which mostly occurs in later part of human life but in a progressive manner (According to Alzheimer Society of Canada 2015). In an attempt to achieving the set aims and objectives;

- I. Identify the various social support intervention strategies that are available to women participating in the Kouvola memory association activities.
- II. Find out from the participating women their perceived impact of the Kouvola memory association programs on social support.

### 1.2 Statement of problem

Despite Finland perceived to be among the most advance countries in the world in terms of adequate provision of good healthcare, memory loss among its people especially the aging population is said to be on the increase (Ministry of social affairs and health, Finland 2013). An estimated population of

about 5000 to 7000 people is believed to be affected annually with memory loss related illnesses (ibid, 7). This big statistical numbers comes with huge financial constraint on economy, where an average cost of providing health needs at home care per person per year was estimated at EUR 19,000 (ibid). At the same time in 2010, EUR 46,000 was recorded as the cost of providing 24-hour services to a single person with memory disorder (ibid).

The fact remains that memory loss as health related issues affecting people is not only limited to the ageing population, but then also some active working groups who are not necessary old per se. It is the belief of health experts that even though memory loss is difficult to cure, there are available remedies to curtail its occurrence. To this end, Finland as a country has setup a national memory programme which has been ongoing from the year 2012-2020 (Ministry of social affairs and health, Finland 2013).

Memory loss association concept being championed across the various regions in Finland is seen as one of the means through which people who perceive themselves to be susceptible to memory loss can be helped to reduce its manifestation.

### 1.3 Research questions

The main object and aim of the Kouvola Memory Association is to empower middle age women living in the Kymenlaakso region to maintain good memory health. The body of ideas mentioned above is the rationale behind this empirical study in answering the question: *What is the perceived impact of the Kouvola Memory Association on social support of participating women?* Through qualitative research method, the below two main research questions will help in answering the above.

1. What type(s) of social support exist for participants of the Kouvola memory association project?
2. How has the memory association programs impacted on the social support in dealing with memory loss among the participants?



## 2 BACKGROUND OF THE STUDY

### 2.1 A brief introduction of Kouvola Memory Association

Kouvola Memory Association (Kouvola MuistiYhdistys) is located within the South-Eastern part of Finland. Even though the association takes its name after Kouvola city, it also operates in Kotka region as they share a common border. Kouvola Memory Association which identifies itself as a nongovernmental and nonprofit organization was established in the year 1990 (Muistiliitto 2015). The statistical data of the population of the people living in the operational areas (Kymenlaakso region) of the Kouvola Memory Association as at the year ending 2015 stood at 178688 (Statistics Finland 2016). Women living in the areas such as Kotka, Kouvola, Hamina, Pyhtää, Miehikälä and Ilitti have the opportunity to access the activities of the association if necessary (väestötietojärjestelmärekisteritilanne 2013).

Despite the greater number of people located within the operation areas of the association, the association members consist of only women aged between 40-65 years (Muistiliitto 2015). The total membership of the women participating in the activities of the Kouvola Memory Association in the year 2013 when data gathering was conducted was estimated at 297 (ibid). All the women participating in the organized activities of Kouvola Memory Association have not been affected by memory loss disease and the instructors of the various activities are made up of health professionals (ibid).

### 2.2 Kouvola Memory Association activities and partners

Project activities of the Kouvola Memory Association are aimed at creating awareness and at the same time, empowering women who are within the age of 40-65 in order to reduce the risk of being affected with memory loss illness. The various programs and activities of the association includes: guidance and counseling on matters which are connected to memory, inviting memory health experts to give lectures to participating members, life style coaching, offering peer support through creation of peer supporting groups, offering sporting activities (physical exercises) and field trips outside the region (Muistiliitto 2015). The association works in partnership with Finnish Ministry of Social Affairs and Health and the municipalities where the association is in

operation. There are other stakeholders such as health practitioners that the association works in partnership with.

### 3 CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

#### 3.1 Definition of memory and memory diseases

Memory according to Cubbit (2007,67, citing Oakeshott 1983) can be referred to as “*mind’s general systems for the retention and retrieval of data derived from past experience, or to the specific data that are thus retrieved; either to the general awareness an individual may have of having a past dimension to his or her existence, or to the more detailed recollection he or she may have of particular past experience*”. There is the likelihood of an individual feeling jeopardized in terms of personal identity when he or she cannot recollect past experiences (Cubbit 2007, 66). In other words, our memories remain a very crucial part of our personal identity as human beings.

When talking about memory related disease, what comes in mind always is *Dementia and Alzheimer’s*. Even though these two (*Dementia and Alzheimer’s*) have connections in health sense, they seem to be used interchangeably in memory disease discourses (Krucik 2013). According to Krucik (ibid) dementia which is associated with memory impairment, on it own, cannot be termed as a disease, but rather a group of symptoms that affects mental capabilities such as memorizing and reasoning. Amongst the variety conditions that causes dementia is the Alzheimer’s disease (ibid). According to Krucik (ibid), there are two stages, *early and advance* stage in the case of an individual being affected. In the early stages of dementia, people affected do forget simple incidents and have difficulty finding their way to otherwise familiar places whiles in the advance stage of dementia; persons affected are unable to do personal daily routines such as bathing (ibid). The most disturbing part of it at this stage is the negative changes in behavior which can sometimes be in the form of aggression (ibid).

The Alzheimer Europe (2015) explains Alzheimer disease as, “a neurodegenerative disease that slowly and progressively destroys brain cells”. Krucik (2013) also elucidate Alzheimer as “a progressive disease of the brain that slowly impairs memory and cognitive function”. The above two explanations to Alzheimer disease is no different from Striepens et al. (2010)

who explain further that, language and thought are also affected. The reality about Alzheimer's disease is that, until now, medical scientists have not been able to establish the exact cause of the disease and there is also no cure for Alzheimer's (Alzheimer Europe 2015). With Alzheimer's disease, persons affected have aberrant dump of protein in their brains especially in the early stage while in the advance stage shows significant contraction of the brain (Krucik 2013).

### 3.2 Functions of the human memory and risks factors

According to Squire et al. (1987), "memory provides the essential substrate for the cognitive activities that define human experience, it allows one to connect the present moment to what came before, and it is the basis of cultural evolution". What we do as individuals and the character we show to the outside world as a result of our experiences are the true reflections of our individual personality (Squire et al. 1987). In other words, memory function is to provide us the opportunity to recall past events in order to make, for example, good judgment of say an intended action. The above Squire (1987) arguments makes memory a bigger concern to medical profession especially how early life affects our experiences, in our development and the possible changes that may occur later stages in life.

Risk factors according to the Alzheimer Europe (2015), even though people of young age are affected by Alzheimer disease, ageing people seems to be more susceptible to developing it. Also, the Alzheimer Society of Canada (2015) posit that, the effect of Alzheimer are the true reflections of an individual's lifestyle, environment and genetic make-up which makes the likelihood of an individual getting a disease. What is important to note is that, risk factors do not lead to getting disease in isolation (Alzheimer's Disease International 2014; Alzheimer Europe 2015; Alzheimer Society of Canada 2015). These risk factors according to some studies have high probability to increase the chances of developing Alzheimer disease or dementia, nonetheless, having none of these factors do not serve as guarantee to developing memory disease (ibid). In the case of memory diseases, studies have shown lots of risk factors that may contribute to the development of memory disorder (Alzheimer's Disease International 2014; Alzheimer Europe 2015; Alzheimer Society of Canada 2015; Qiu, Winblad, & Fratiglioni 2005;

Launer et al. 2000; Kivipelto et al. 2001; Kivipelto et al. 2002; Vanhanen et al. 2006). Among many of the risk factors suggested which may contribute to developing memory disease are; obesity, smoking, high blood pressure, diabetes, head injury, alcohol, diet, physical activity, cholesterol depression, sleep disorder, education and occupation (Alzheimer's Disease International 2014). The Alzheimer's Disease International (2014) groups the above listed risk factors into four common factors. The four common risk factors that the above lists fall under are; developmental and early-life risk factors, psychological factors, lifestyle and cardiovascular risk factors (ibid, 4). Also, according to Alzheimer Society of Canada (2015), all the risk factors listed above are either found to be modified or non-modified factors. With modified factors, one has the possibility to change from it while non-modified factors which are linked to age and genetic make-up, cannot be changed in one's life (ibid).

### 3.2.1 Old age and genetic make-up

According to Alzheimer's Disease International (2014, 12), empirical studies have proven that, dementia has a lifelong trail where each developmental stage has its own associated risk but in most cases they accumulate and manifest later on. Also, the brain development and the size are significantly determined by what happens during the foetal life and the first two years when one is born (ibid). Old age and genetic make-up which are classified under non-modifiable risk factor have been proven to have link with Alzheimer and dementia within health promotion (Alzheimer Society of Canada 2015). Alzheimer Society of Canada (2015) argues that, Alzheimer's disease in normal medical sense is not development that should be tied to aging, age cannot be down-played when looking for risk factors for Alzheimer's disease also. As we grow old, the body immune system weakens which makes us prone to all forms of health risks. We are unable to get involved in, for example, active socialization thereby stressing ourselves (Fratiglioni et al. 2004). According to Fratiglioni et al. (ibid), in our midlife and late life, it is essential that we have an active social networks as it helps in reducing psychological stress vascular damage which can trigger Alzheimer or dementia.

### 3.2.2 High cholesterol

Hypercholesterolemia otherwise known as high cholesterol in midlife has been proven to increase the risk of dementia in future (Alzheimer Europe 2015, 4; Alzheimer's Disease International 2014; Alzheimer Society of Canada 2015; Kivipelto et al. 2002). According to Alzheimer's Disease International (2014, 72), what makes up cholesterol in bodies can be grouped into three which are; high density lipoprotein (HDL), low density lipoprotein (LDL) and very low density lipoprotein (VLDL). High cholesterol occurs in our bodies when the total cholesterol level is high (ibid). In other words, there is higher risk for people with high cholesterol level in their body to develop dementia compared to those with low level of cholesterol. High cholesterol according to studies shows high prevalence rate among people living in high income countries in the world (ibid). What is most important is that, people aged between 40 and over should get periodic cholesterol level check to maintain a desirable level of cholesterol in their bodies (Alzheimer's Disease International 2014). Also, studies reveals that, people who take a class of drugs that contains statins have the possibility of reducing cholesterol level thereby also reducing risk of cardiovascular diseases (Alzheimer's Disease International 2014, 49; Alzheimer Society of Canada 2015).

### 3.2.3 Smoking

Smoking which is part of modified risk factors identified is one major cause of death worldwide (Alzheimer's Disease International 2014, 42). The Alzheimer's Disease International report (ibid) reveals that, there is an expected increase from six million deaths related to tobacco currently to eight million by the year 2030. Cancer, diabetes and cardiovascular diseases which are among many diseases have been linked partly to the habit of smoking (ibid, 42). Tobacco which is the substance mostly smoked by people has been found to contain harmful substance which favors oxidative stress and inflammation, which effectively increases Alzheimer disease pathology (ibid, 43). A study conducted on smokers and non-smokers reveals that, smokers' stands 45% to 50% higher risk of developing Alzheimer (Alzheimer Europe 2015, 2; Alzheimer Society of Canada, 2015 20). However, the same study caution that the evidence stated is not that strong enough to draw an emphatic conclusion. This caution is important as studies also shows that, tobacco, also

contains nicotine which offer cholinergic protection thereby decreasing the risk of Alzheimer disease (Alzheimer's Disease International 2014, 43). If one stops smoking which falls under modified risks can help reduce the likelihood of memory related diseases such as Alzheimer (Alzheimer Europe 2015, 2), even though studies shows that, ex-smokers are at similar risk to never smokers (ibid, 48). It is therefore imperative that stakeholders in health promotion advocate for individuals, who have developed the habit of smoking, quit smoking entirely.

#### 3.2.4 High blood pressure

People who have high blood pressure also known as hypertension which is chronic medical condition, in midlife are said to risk developing dementia when compared to people who have been proven to have normal blood pressure (Alzheimer's Disease International 2014; Alzheimer Society of Canada 2015). According to Carretero and Oparil (2000), hypertension can be classified into primary and secondary hypertension. 90-95% cases which have been categorized under primary hypertension have been proven to have no medical explanation as to what might have caused it while the 5-10% cases classified under secondary hypertension are caused by conditions which affect arteries, the heart and kidneys (ibid). What it does, is to decrease vascular functioning of the blood and the brain which results in protein extravasation to the brain tissue thereby damaging synaptic function (Alzheimer's Disease International, 2014 67). Hypertension also categorized under modified risk factor can be prevented by following a well-planned dietary regiment, physical activity and avoiding bad lifestyles (Alzheimer's Disease International 2014; Alzheimer Society of Canada, 2015). In other words, following good and medically recommended dietary system and physical activities can help bring down the risk of hypertension which is among the risk factors of memory diseases.

#### 3.2.5 Diabetes

Studies have shown that diabetes mellitus (DM) especially the type 2 diabetes which is also a chronic disorder of carbohydrate metabolism in midlife is associated with increased risk of memory diseases such as Alzheimer's disease and cognitive impairments (Alzheimer's Disease International, 2014; Alzheimer Europe, 2015; Alzheimer Society of Canada 2015; Ott et al. 1999).

According to Alzheimer Society of Canada (2015), there is twice the likelihood that people who are living with type 2 diabetes to develop dementia when compared to people who have been proven not to have diabetes at all. What is so far known about diabetes type 2 is that its development in humans is as a result of lifestyle factors which are also preventable (Alzheimer's Disease International 2014, 75). The prevalence rate among sexes, race, age groups and educational status world-wide, is said to be on the ascendency over the years (Crooks et al. 2003). Despite this high increase in prevalence rate, there are things that can be done to effectively manage or reduce the risks of developing diabetes which includes; maintaining healthy weight and eating low sugar contained foods (Alzheimer Europe 2015, 2). Those who have diabetes already are employed to take it serious to manage well their condition especially the kinds of food they eat (ibid)

### 3.2.6 Obesity and lack of physical activity

According to Alzheimer's Disease International report (2014, 70), even though children born with larger weight and body sizes may be linked with better cognition, in the same way, overweight and obesity as result of excessive nutrients and energy intake with reduction in physical activities is notoriously harmful and also associated with high death risks. It is estimated that, over 1.46 billion adults over the world in the year 2008 had a higher body mass index (BMI) deemed as overweight (ibid). Obesity according to studies may contribute to developing risk factors for dementia (Alzheimer Europe 2015, 3). Midlife obesity and lack of physical activity also according to some empirical studies (Gustafson et al. 2003; Alzheimer's Disease International 2014, 70; Alzheimer Society of Canada 2015) are known to increase the risks of memory disease like Alzheimer. Also, the above risks factors important risk factors has been linked with increasing cases of high blood pressure as a result of its effect on midlife (ibid). Obesity and lack of physical activity which are modified risk factors under memory related diseases can be changed over time through rigorous exercise regime and eating healthy food with low cholesterol level in them (Alzheimer Europe 2015, 3). Since obesity in midlife has been found to increase the probability of being affected with dementia or Alzheimer, the advice is that, serious actions are needed to address its prevalence (Alzheimer Society of Canada 2015).

### 3.2.7 Alcohol

Among all the risk factors, studies have shown that alcohol comes 5<sup>th</sup> in terms of ranking especially with regards to death and disability world over (Alzheimer's Disease International 2014; Alzheimer Society of Canada 2015). Aside death and disability, it has also been established that, alcohol is a causal factor in 200 disease and injuries (ibid). Diseases such as liver cirrhosis, cancer and cardiovascular disease are among the many listed diseases cause by high intake of alcohol (Alzheimer's Disease International 2014, 49). In other words, there is more likelihood of increasing the risk of developing all kinds of dementia which includes Alzheimer's diseases and vascular dementia if one takes more than the recommended level of alcohol (Alzheimer Europe 2015, 4). The Alzheimer Society of Canada report (2015) also back the above claim that, it is scientifically proven that low alcohol intake by people reduces the risk of developing dementia while excessive drinkers are highly likely to develop dementia. There is evidence to prove that alcohol according to Alzheimer's Disease International (2014, 49) "produces cerebral loss, especially from the white matter that is related to memory processing and visuospatial functioning". Empirical studies, however, recommend that, low intake of alcohol has the possibility to protect the brain from dementia while keeping the heart and vascular system in good health status (Alzheimer Europe 2015, 4). Drinking of alcohol which is lifestyle or habit can be changed under the modified risk factors. It will be ideal in health promotion sense to encourage people to stop taking of alcohol to effectively prevent Alzheimer and dementia at the later stage of life.

### 3.2.8 Low levels of formal education

Empirical research has shown that educational level attainment plays a crucial role in either reducing or increasing the risks of developing dementia (Alzheimer's Disease International 2014; Alzheimer Society of Canada 2015; Karp et al. 2004). Karp et al. (2004) posit that, the risk of dementia is high among people who have low or no attainments in education. Alzheimer's Disease International (2014, 25) looking at how one's level of education contribute to developing Alzheimer disease, points to a weaker association. Also, Alzheimer Society of Canada (2015) argues that, there is the need for clarification how quantity and quality of education protect people against



dementia. Higher education attainment as revealed among the studies (Alzheimer's Disease International 2014; Alzheimer Society of Canada 2015; Karp et al. 2004), can have a positive influence on for example social network. That is, there is the strong possibility to build social network connection which can be essentially beneficial after midlife and also keeping the brain more active through progressive learning.

### 3.2.9 Depression

Empirical studies have shown that, depression remains as one of the most common mental conditions that affect most people in their adulthood (Alzheimer's Disease International 2014). According to Alzheimer's Disease International (2014, 28), the prevalence rate of depression among adults in most communities is very high. Alzheimer Society of Canada (2015) argues that, developing dementia among the aged may be linked to the experience of depression in their late stages in life or may have history of depression in their early life. There are two schools of thought when it comes to linking depression and dementia. The first school of thought hypothesis that, depression in fact, is a risk factor for developing dementia whereas the second school of thought hypothesizes that, depression may be an early sign of the dementia disease (Alzheimer's Disease International 2014, 28). Studies conducted on depression and its association with dementia have not been able to clearly state the associations of the above two schools of thoughts. That is, "whether depression is a prodrome of dementia or an independent causal risk factor" (ibid).

### 3.2.10 Social network

Social networking as an important human endeavor plays a crucial role in promoting interaction between and among people which in turn, affects people's beliefs and behaviors. Mitchell (1980, cited by Brieger 2006) defines social network as "a specific set of linkages among a defined set of persons, with the additional property that the characteristics of these linkages as a whole can be used to interpret the social behavior of the persons involved". Lack of social network (social connections) in life has been linked to increasing risk of cognitive decline and dementia at the later stage in life (Wilson et al. 2007). It is important to know that the number of social network

connection has been identified to play a crucial role in Alzheimer's disease pathology and the function of the human cognitive (Bennett et al. 2006). As already discussed earlier concerning depression, an active social network connections has a positive influence in reducing the probability of developing dementia (Alzheimer Society of Canada 2015). Also, studies conducted by Karp et al. (2006) shows that, engaging in active social activities for example, helps reduce risk of dementia.

### 3.3 Statistical information on memory disease prevalence in Finland

There is an estimated 46 million people living with dementia worldwide currently which expected to increase to 135.5 million by the year 2050 (World Alzheimer Report 2015). The current figure of people having to live with dementia is approximately 33% increment from 36 million people in the 2010 report (World Alzheimer Report 2010). This is indeed alarming and should be of great concern to relevant stakeholders in memory health promotion. The prevalence rate of dementia and other memory health related diseases there is no doubt, will negatively have economic impact across the world over (World Alzheimer Report 2015). According to the 2015 report on Alzheimer, the cost that will be incurred in treating dementia will be around a trillion dollar by the year 2018 whiles currently; \$818 billion is the cost of treatment worldwide (ibid). The whopping amount quoted above, would have been the largest economy in the world according to the 2015 report if dementia care was as a matter of fact a country (ibid). This revelation, coupled with other epidemics indeed creates a serious challenge to both the public health and social care institutions worldwide.

In Finland, which is the focal point of this study, the prevalence rate of dementia as at the year 2012 stood at 1.71% of the total population which was estimated at 5,402,627 (Alzheimer Europe 2015). In other words, 92,232 people are living with dementia in Finland which when compared with the overall European Union average which stood at 1.55%. The Alzheimer Europe (2015) provides an estimated prevalence table for people living with dementia in Finland by breaking it down to age group, gender and their sum up. Below is a table (table 1.) showing prevalence rate of dementia in Finland. Empirical study shows that thirty-six (36) people are diagnosed everyday with memory disorder whereas the national figure annually stands at 13,000

(Ministry of Social Affairs and Health 2013, p.7). Putting aside elderly people who are affected by memory disorder as they progress in age, an estimated numbers between 5000 and 7000 people of working age group are said to be suffering from memory disorder (ibid). A population of about 120000 in Finland are said to be suffering from mild cognitive impairment according to the Ministry of Social Affairs and Health (2013, p.7) and needs diagnostic attention.

Table 1: Alzheimer prevalence in Finland. (Alzheimer Europe 2015)

Age group	Men with dementia	Women with dementia	Total
30 – 59	1,717	944	2,661
60 – 64	395	1,855	2,250
65 – 69	2,748	2,321	5,069
70 – 74	3,270	4,664	7,935
75 – 79	5,431	8,062	13,493
80 – 84	7,572	14,557	22,129
85 – 89	5,459	16,956	22,414
90 – 94	2,272	10,866	13,139
95+	421	2,721	3,141
Total	29,287	62,945	92,232

### 3.4 Midlife social interaction and reducing risks of memory related diseases

Early literature has posited that the enhancement of midlife well-being can be attributed to early adulthood positive social interaction experiences and that; this can be felt in not less than two ways (Carstensen 1995). Firstly, according to Carstensen (ibid), an individual has the possibility to benefit from social networks in whatever situation he or she may find him or herself in future result of building a good inter personal skills in early stages of life. Secondly, one stands the chance of fulfilling emotional closeness goals in adulthood when one is able to cultivate the habit of initiating and maintaining relationships (ibid). Developing the ability to initiate and maintain close relationships in early adulthood may facilitate the ongoing cultivation of close relationships, allowing individuals to fulfill emotional closeness goals that become increasingly important across adulthood (Carstensen 1995). These emotionally close relationships have, in turn, been shown to ease adjustment

to transitions throughout life (Hartup and Stevens 1997) and promote healthy psychological adjustment.

## 4 THEORETICAL FRAMEWORKS

According to Van Ryn and Heany (1992), theories basically refers to “systematically organized knowledge applicable in a relatively wide variety of circumstances devised to analyze, predict or otherwise explain the nature or behavior of a specified set of phenomena that could be used as the basis for action”. In this chapter, two theoretical frameworks which form the basis of the phenomena being studied are extricated. I referred to them as framework because they have not been solidly theorized in the field of health promotion. The two theoretical frameworks employed in this study are; the health belief model and, social support. The two theories will be connected after bringing out the general debates that has been outlined by various authors.

### 4.1 Health belief model

Irwin Rosenstock in the year 1966 developed the “Health Belief Model (HBM)” in an effort to promoting health and the model due to its insightfulness, has since become one of the widely used models in health promotion intervention strategies (Rosenstock 1966). The HBM in its early developing stage was made up of four important constructs which were; perceived susceptibility, perceived severity, perceived barriers and perceived costs of adhering to intervention remedies (Rosenstock 1974). These four constructs outline by Rosenstock through research and review in the health promotion field has since seen modification to include how people respond to symptoms and illness, and compliance through strict medical directives (Becker and Maiman 1975).

The health belief model (HBM) in recent years has been used in a significant number of researches to predict health behaviors of individuals and groups (Griffin 2011; Brieger 2006; Karp et al. 2004). Any health related intervention taking through the HBM according to Roden (2004), should be cost effective and at the same time effective in terms of its outcomes. The most import part

of the HBM in relation to this study is tied to the perceived susceptibility of individuals and the intervention strategies they adopt to reduce vulnerability.

In other words, how does the individual perceived susceptibility influence their joining a memory health promotion association and how effective the intervention strategies outcome are on social support. In the area of prevention for example, Sheeran and Abraham (1996) conducted a study on preventive health behaviors in relation to physical exercise, diet, and smoking.

## 4.2 Social support theory

Social support concept is a compilation of many terms which makes it empirically wrong to be viewed as a unitary concept according to Sarason et al. (1990, 9). The incoherent nature of the term social support is as result of not being able to find a common ground in defining the term by scholars in the field of social research (Sarason et al. 1990, 10). Notwithstanding this lack of coherent approach to finding a unitary definition to social support, it has not prevented scholars from defining the concept (Boundless 2015; Peplau 1985, 280).

Social support is “the presence of a social network that can either be expected to provide or actually provides social support can have extremely positive effects on the experience of stress and successful stress management” (Boundless 2015). Also Peplau (1985, 280), defines social support as, “the availability of interpersonal resources”. Social support in this sense can be in different forms which are; emotional, tangible and informational or companionship which Boundless (2015) posit can be either “*subjectively perceived or objectively received*”. While the subjectively perceived is linked with an individual experience or judgment of availability of support in times of need and how effective that support will be, an objectively received is basically a well-defined help one get or offered in a time of need (ibid).

As humans, most of our accomplishments which also include how we manage for example stress can be derived from the existence of social support (ibid). Empirical literature reveals that there is a powerful link between social relationship and physical mental health promotion and longevity (Berkman et al. 2000, 1). Boundless (ibid) stresses that, without social support, social isolation can have undesirable impact on ones’ life which can result in

depression and stress. Boundless (2015) reveals that there is evidence to the effect that people who have little or no social support in most cases reports of experiencing depression, anxiety and mental disorders compared to those who gets substantial amount of social support.

According to (Lakey and Cohen 2001, 29) “social support research should have basis in theories about how social relations influence our cognitions, emotions, behaviors and biology”. Lakey and Cohen (ibid), present three most important theoretical perspectives on social support research work. These three important theoretical perspectives are; the stress and coping perspective, the social constructionist perspective, the relationship perspective.

According to Lakey and Cohen, “the stress and coping perspective proposes that support contributes to health by protecting people from adverse of stress. The social constructionist perspective proposes that support directly influences health by promoting self-esteem and self-regulation, regardless of the presence of stress. While the relationship perspective predicts that the health effect of social support cannot be separated from relationship processes that often co-occur with support, such as companionship, and low social conflict.

Lakey and Cohen (ibid, 36) argue that “social cognition and symbolic interactionism provide an alternative perspective on social support”. Although these two views differ in their recent intellectual tradition and method, they share common origins in pragmatist philosophy and thereby share many core assumptions (Barone, Maddux, and Snyder 1997) cited in Lakey and Cohen (ibid, 36)

Banduras’s (1986) social cognitive theory identifies personal, behavioral and environmental factors that influence people’s behaviors. Bandura (2004) also used the model to promote healthy behavior adoption and disease prevention. Personal factors consist of knowledge, perceived self-efficacy, and outcome expectations related to the behavior adoption. It must be noted that knowledge was not measured in the current study (due to school district limitations). Behavioral factors include proximal and distal goals while environmental factors include barriers and support.

Personal factors, including beliefs of personal efficacy play a central role in personal change. This focal belief is the foundation of human motivation and action (Bandura 2004, p3). People must believe (or be efficacious) that they have the power to enact change (e.g., to be physically active) in order for it to happen. This construct measures an individual's perceived ability to overcome challenges and deficits that may influence behavior. Outcome expectations also influence behaviors and are directly related to the individual's beliefs about costs and benefits of the behavior. When outcome expectations are more positive, there is a greater chance of engagement in the behavior (Bandura 2004).

The final perspective which provided earlier which forms part of the theoretical framework of this study is the "relationship perspective". According to (Lakey and Cohen 2001, 42) relationship perspective on social support conceptualizes support as part of more generic relationship processes. That is, it does not follow clear outline perspective linked to an already available research literature or intellectual tradition. Rather, it is a group of hypotheses that attribute social support to other relationship qualities or processes. From the point of view of Lakey and Cohen, these relationships qualities reflect neither actual help during times of neither stress nor beliefs about support per se.

Lakey and Cohen (ibid) believes that, this perspective will become increasingly important and provide alternative ways of thinking about social support. Stressing that one possibility is that our cognitions about our social environment are strongly interrelated and overlapping and that measure of support cannot be discriminated from closely associated concept such as low conflict, companionship, intimacy and social skills.

Sarason et al. (1990, 321) based on earlier writings in social support research by well-known scholars in the field such; Weiss 1974, Cobb 1979, Kahn 1979, Schaefer et al. 1981, and Cohen et al. 1985 (see table 1) have come out with not only explicit but a well explained types of social support concept. Table 1 clearly shows a comparison of the various components of social support enumerated by the above mention scholars on the subject being studied. Sarason et al. (ibid, 322), identified five basic social support dimensions which are; emotional support, social integration or network support, esteem support,

tangible aid (support) and informational support by comparing all the component models of social support outlined by the scholars mentioned above.

*Emotional support* according to Sarason (ibid), is being able to get comfort from other people in stress related situations which positively makes the affected person feel secure and most especially cared for at that bad moment. Concerning social integration or network support as type of social support, it basically refers to how individuals feel connected to a bigger social group where members in the group share common goals (ibid).

On social integration or network support, what transpires within the group's activities are almost similar to casual friendship which in turn allow members to freely engage in all activities being it social or recreational (ibid). Under the *esteem support*, this is where an individual competence is enhanced by people around in a form of giving a positive feedback the individual (ibid). What this positive feedback does is that it bolsters the individual self-esteem which in turn helps the individual to cope with stressful events in his/her life.

*Tangible aid (support)* in social support according to Sarason et al. (ibid), are related to material assistance such as cash (finance), shelter (house) among others to support a person in stressful situation. The last but not the least type of social support which is *informational support* ensures that, an individual is provided with all the relevant information through advice, guidance and counseling in dealing with the problem at hand (ibid). Giving advice, guidance and counseling which form part of informational support can occur in one-on-one bases or in a common shared experience group.



Table 2: Comparison of component Models of social support (Source: Sarason et al, 1990)

Weiss,1974	Cobb, 1979	Kahn,1979	Schaefer et al, 1981	Cohen et al, 1985
Attachment	Emotional support	Affect	Emotional support	
Social integration	Network support			Belonging support
Reassurance of worth	Esteem support	Affirmation		Self-esteem support
Reliable alliance	Material support	Aid	Tangible aid	Tangible support
Guidance	Instrumental support		Informational support	Appraisal support
Opportunity for nurturance	Active support			

#### 4.3 HBM and Social Support as theoretical framework

The health belief model (HBM) and social support theories are very important in actions and plans towards effective health promotion in individual, community and national levels. The two theories are indispensable as the study seeks to examine how the participants perceived impact of memory health promotion based on the intervention strategies.

## 5 RESEARCH METHODOLOGY

In this chapter of the empirical study, there is a justification as to why specific research methodology was used in order to meet the research objectives. Also, this chapter presents the ethical consideration of the data collection, the validity and the limitation of this empirical study.

### 5.1 Qualitative research methodology

In every empirical study, the scientific research communities have at their disposal three main methodological approaches which are; qualitative, quantitative and mix methods. This research study deployed qualitative case study method to investigate how Kouvola memory association activities are impacting on the social support of the participating women in Finland. To achieve this goal, the study adheres to systematic scientific investigation of the activities of Kouvola memory association inter alia social support theories order to make a meaning out of how it is impacting on the lives of the participating women (Shank 2002, 5).

In studying society or any social settings which is connected to physical realities (Paul 2004, 11) which this study is about, it is reasonable that qualitative research method is applied. The study explores how the processes impact on the lives of the women in the Kouvola and Kotka regions. Qualitative research method is the best method to use because it enabled me to have direct contact and at the same time have the research results grounded in the experiences of the research subjects studied (Shank 2002, 5).

Getting a direct contact with my research subjects in a natural environment will enable me to fairly understand their experiences, thereby interpreting their understanding of the phenomena objectively (Denzin& Lincoln 2000, 3). Qualitative research methodology was used because it offered me a great opportunity to solicit from my research subject their thoughts and feeling of the study.

## 5.2 Kouvola memory association as a case study

This scientific study used case study approach. As a matter of principle and research guidelines, it is imperative and obligatory for every research state clearly the kind of research design being used (Punch 2005 145). The case study approach was imperative as the study seeks to investigate the activities of an organization and evaluate its activities impact on social support of participating members by using face-to-face interview and observation (Cresswell 2007, 92). The case study approach is the best option because it supports researchers to understand a social reality which is not limited to this study.

Thematic technique derived from the theoretical framework in this study was used in the collection of data which is invaluable and reflects facts of the group studied (Silverman 2005 126-7). This empirical research employed multiple case studies to gather data from two regions (Kouvola and Kotka) in Finland as indicated in the previous chapters. This was important as it balances the representation of the research participants and the towns involved (Yin 2014, 56). The multiple case study approach used in this research enabled me to Using the multiple case study design in this research was to enable me examine how the results of the study backs the theoretical framework of this empirical research.

To carry out this study, two groups in the Kouvola memory association were identified. The two groups are the service providers and the beneficiaries (participating women). The two identified groups were chosen for the facts that, they are the best group to fall on in order to investigate holistically, the research phenomena. The purpose of relying two mentioned groups is to get a wider opinion of the service providers and participating women concerning the overall impact of the activities of the association on social support. Multiple case designs in this sense allowed me to use numerous sources within the confines of the case study (Yin 2014, 56). Kouvola memory association was chosen for the study because the association granted the permission to carry out this research with the objective of getting feedback on the overall performance and impact of its activities.

### 5.3 Face-to-face interview

Scientific researchers all over the world have in their disposal many style to deploy in gathering data in their areas of empirical studies. By extension of these available opportunities, I adopted face-to-face interview which many referred to as personal interview and active participation through observation to gather all the relevant data for the study. The face-to-face interview was to enable me produce people's experiences and accounts of events, their opinions and attitudes, and most importantly their perceptions of the phenomena being studied (Cormack 2000, 78)

Using face-to-face interview aroused out of my curiosity to examine people's life histories and issues relating to their everyday activities (Silverman 2000, 1), and at the same time get personal perceptions and opinions of my subjects (Cormack 2002, 54) of the impact of the memory association on social support of the participating women. I had the opportunity to familiarized myself with my subjects (interviewees) and get their views and ideas of the case study. Face-to-face interview enabled me as a social scientific researcher to probe further, participants of the interview to clarify response to the questions raised spontaneously since they have access to important information (Paul 2004, 56-57). The perspectives of the participants in the interview are relevant looking at the in-depth knowledge they have and the clarity with which they can share this knowledge with me (Patton 2002, 341). The most important of the adoption of face-to-face interview was the natural setting in which the data was collected (Paul 2004, 56-57) and the benefit of creating a meaningful bond with the interviewees of the study.

All the data for this study were collected in just day from 8:00 am in the morning to 6:30 pm in the evening on the 25<sup>th</sup> of November 2013 in Kotka and Kouvola office of Kouvola Muistiyhdistys. This situation occurred as all interview participants agreed on meeting in one specified date, location and different meeting time schedules through the facilitation of the thesis commissioned organization mentioned. The interview was conducted on one-on-one with the interviewees. I used portable audio recording machine to save all the interview conversation exchanges on the subject being studied.

I used open-ended style of interviewing to help me get relevant information missing in my questions. In other words, I developed semi-structured interview questions for the interviewees to help me get other useful information which otherwise may not have been captured in the prepared questions. The entire question I asked was semi-structured questions and solicited more answers in an open-form (Meredith et al. 2003, 240). Semi-structured interviews are guided by recommended themes but provide an opportunity for the interviewees to develop their responses (Desai and Potter 2006, 144). This method provided an opportunity for my interviewees to freely express their thoughts on the questions relating to the study (Foddy 1993, 131). The number of interview questions was ten each for the participants and the managers of the association which aimed at getting varied but necessary opinions from the research target group (See appendix I). It must also be noted that all the questions that I asked were pre-planned (see appendix I for more details).

Twelve (12) individuals were interviewed, ten (10) participants and two (2) managers of Kouvola memory association. The same format was used to interview all the participants even though two sets of questions were developed for the managers and participants of the association (see appendix I) and each interview lasted for 45 minutes. There were twelve (12) different questions in all to get the needed research data (ibid).

There were some challenges that were encountered using face-to-face interview in this research study which is worth sharing. I had to use one day to conduct the entire interview making me exhausted in the process. Since the research locations (Kotka and Kouvola) were far from where I live, I had to travel long distances within the day to meet the interviewees.

#### 5.4 Ethics of data gathering and analysis

Weber (1946) cited in Silverman 2005, 257 reveals how the contamination of research in value by researchers a century past has helped to identify and studied research problems in a particular way. The general thinking that scientific researchers follow ethical guidelines and are motivated by noble aims to discover new knowledge in an attempt to contribute to professional practice according to Meredith (2003, 63) needs serious interrogation. An

ethical constraint in the case of this study was how best to protect the identity of my research participants which Meredith (ibid, 446) emphasizes confront researchers. To confront the ethical constraints, I made sure that the identity of my respondents was protected such that they cannot be easily identified. I sought the permission from Kouvola memory association about what the studies seeks to achieve and making contact with their members. I discussed with the association the details of my research question. My research respondents were assured of refraining from passing on their information to a third party for whatsoever reasons. All the audio recording was done with the permission of my respondent.

### 5.5 Validity and limitations of the study

Accomplishment of credibility, neutrality, conformity consistency and applicability are the trademark of a valid research (Lincoln & Guba 1985, 300). Contact with the association was possible through the assistance of my study institution in order to get connected to the right people for the study. Neutrality was another area which I took serious consideration of when I was collecting the research data. While avoiding the use of personal experiences in the study, I refrained from coaching my respondents in their submissions. Transcription of the data was done verbatim devoid of elimination or additions concerning the information provided.

None withstanding the above considerations, a few limitations were identified. The method of sampling used to gather the data was limited. I had to adapt to the use of opportunity sampling method in the two locations based on the willingness of the participants to avail themselves for this research purpose. Using just one full day to interview all the potential interviewees was another limitation identified. In some cases due to limited time that the interviewees could offer, it made it difficult to probe further on given answers to the interview question. The last but not the least limitation identified in this study, was language issue. Not all my interviewees could perfectly answer my questions in English which I have command on. I sought assistance from one of the executives of the association to interpret my questions from English to Finnish and vice-versa. In this case, it made it difficult to know if the right questions or answers were given. Also, some of the questions were somehow viewed by the respondents to be personal which made them feel uneasy to

answer them in the presence of the interpreter. This situation was quite understandable looking at how privacy is held generally by Finnish society.

## 5.6 Method of data analyses

Scientific researchers and most importantly qualitative researchers have a good number of choices to pick from when conducting a scientific study. Qualitative content analysis, qualitative thematic analysis and constructionist methods are the three methods that can be used by qualitative researchers in analyzing focus group data within social science (Silverman 2011, 213-214). What method of data analysis sought to do in every research is to provide a thought insight as to how answers were generated from the research questions set at the beginning of the study (Creswell 2005, 241).

The method of data analysis within qualitative researches varies and the choice of picking among the lots depends solely on the researcher. This case study like many other case studies, involves examining, categorizing, tabulating, testing and where possible, combining qualitative and quantitative methods in line with earlier preposition of the research (Yin 2003, 109). It is however worth noting that, this empirical research never combined the qualitative and quantitative method in analyzing the data but rather used only qualitative data analysis method. The main reason for employing only qualitative method of data analysis was the fact that, the study does not seek to test nor reproduce an existing research work.

Thematic analysis was the style used in analyzing the data collected from the research locations which were Kouvola and Kotka both in Finland as already stated in the previous chapters. The adoption of thematic analysis was based on the fact that, the whole study is an exploratory and hence, best fit for the study (Creswell 2007, 148). Thematic analysis citing Boyatzis 1998, according to Braun and Clark (2006, 6) is a method for identifying, analyzing, and reporting patterns (themes) within data and minimally organizes and describes one's data set in detail but also goes further by interpreting all the various aspects of the research topic. Thematic analysis was very useful in this study because, the used theoretical framework is well connected to the data collected from the field (Braun and Clark 2006, 9). Under this case study research, the health belief model (HBM) and social support theory provides

the necessary themes which make it more convenient and easy to adopt thematic data analysis approach.

The research work which sought to evaluate the perceived impact of Kouvola memory association (Kouvola Muistiyhdistys) on social support participating women as indicated earlier adopted case study approach. Promotion of memory health remains one of the major health promotion issues at local, national and international levels. There have been many attempts to tackle memory related health problem and among them is the “National Memory Programme 2012-2020” in Finland. It is prudent that studies are conducted to check the effectiveness or otherwise of some of these ongoing relevant national programmes to provide an empirical information on actions being taking.

Using the health belief model (HBM) and social support as theoretical framework, themes based on emotional support, social integration or network support, esteem support, tangible aid support and informational support were developed in the analysis of the case study data. According to Creswell (2005, 243), themes provides researchers the alternative approach in data analysis such that they give similar codes which are combined together to provide tangible idea in the database which are indispensable in qualitative data study.

The above explanation of using thematic data analysis approach in analyzing the research data collected is not enough if there is no explicit information to readers how the themes were identified and coded. It is worth mentioning that there are many different way of carrying out this process of thematic data analysis. Since the data gathering in the research work began with audio recording interview, there was the need to first, through writing, transcribe verbatim what the interviewees said into Microsoft Office Word. Transcription in research is basically scientific detail available, which enable researchers to proceed to the main business of data analysis (Silverman 2011, 282). To make a meaning out of all the raw data collected, the audio recording interviews were written down in a Microsoft Office Word program without removing any part of the conversation giving recognition to even punctuation marks (Braun and Clarke 2006, 17). This was done repeatedly to spot missing key words that might happen in the course of listening and writing (Silverman



2011, 282). Carrying out this first stage of data processing to do involved a lot of time and body endurance looking at the length of each interview conducted.

After the first step of the data processing which is transcription, the next action taken was coding of the written down data. Coding according to Chava and Nachmias (2000 305) is the process where answers retrieved from respondents of the research questions are classified into meaningful categories. The coding was done by carefully reading through the answers written down using the Microsoft Office Word program in order to get the general idea of what the respondents said while linking it to the research question (Braun and Clarke 2006, 26-30). Through this process, all the identified codes in the transcribed data were highlighted with the help of Microsoft Office Word comment tool.

## 6 RESULTS

In this results and discussion section, there is an explicit presentation of the outcome of the empirical data inquiry sought from the Kouvola Memory Association in relation to social support. The main themes analyzed are the kind(s) of social support (emotional support, social integration/network support, self-esteem, tangible aid and informational support) and the impact of Kouvola Memory Association. The result from the data analysis showed that, participants share a common view when on the kind(s) of social support that is available to them in the association's activities. Below, are the results coupled with discussions of the research findings from the interviews conducted.

### 6.1 Demography of respondents

To keep track of the respondents to the interview questions and then also to create some form of good starting point to whole interview process, basic information about the respondents were first asked. Their age, educational background, the numbers of years they have lived in the area among others (see appendix 1) were captured in the demographic section of the interview questions. All the respondent of this empirical study were women whose ages ranges from 45 to 65 years. These women, in total, were ten in number as stated in the research methodology section of the study. Among the ten

women interviewed, three are association members from the Kouvola region while the remaining seven, come from Kotka region. Concerning the interviewees' educational background, all those interviewed have had a formal education with the lowest education level being vocational school and the university as the highest. Most of the interviewees were either retired or about to retire from active working life. Seven out of the ten women interviewed are married or co-habiting with the three remaining divorced with their partners.

## 6.2 Kind(s) of social support

Social support as explained earlier in this study is the availability of positive inter-personal dialogue through various means to promote human well-being. In the case of the Kouvola Memory Association, participants in one way or the other share a common cause or aim which can be referred to as a group. In other words, while groups are formed for different reasons, within a group, members share a common interest which becomes the driving force for the existence and cohesion of the group (Bubmann 2014, 27). The Kouvola Memory Association participants and the service providers' common interest here, is to essentially promote memory health among women in the Kouvola and Kotka region. The kind(s) of social support that are available to the participants have a direct effect on the cause of the group members. This notwithstanding, the kind(s) of social support that are available to participants of the Kouvola Memory Association in reality has been investigated and empirical answers provided with help of the below research question:

*Q1. What kind(s) of social support exist for participants of the Kouvola memory association project?*

## 6.3 Emotional support

The results from the data analyzed show that emotional support which is getting needed comfort from other people in stress-related situations is available to participants in the Kouvola Memory Association project. Even though the participants emphasized that their families in most situations provide them emotional support in stressful or difficult situations, the emotional support that exists in the Kouvola Memory Association has helped in essentially calming down their fears when it comes to memory health-related risks. Below are some few excerpts of interview responses from the interviewees:

*"They (KouvolaMemory Association) are always there to offer me all kinds of supports including psychological support when I feel lonely".*

*"They (KouvolaMemory Association) have made me to understand that everyone has a problem but only needs to be strong to overcome my unfortunate situation. I am becoming more positive".*

The above excerpts in relation to emotional support confirm the view of Sarason et al (1990) in the literature review section. Almost all the participants acknowledged getting relevant psychological support from the KouvolaMemory Association project such that since they (the participants) understand each members' situation and above all, aspirations. This is demonstrated in the above excerpts where respondents talk about counselling activities when they meet as a group and sometimes on individual level.

#### 6.4 Social integration / network support

In exploring the kind(s) of support which are available to participants in the KouvolaMemory Association project where respondents were asked to describe what they get, social integration or social network was identified as one of them. Hardly any respondent of the interview questions could hide their positive feeling about what the KouvolaMemory Association project has offered them in terms of getting acquainted to new people in their everyday lives. The respondents claim that even though they have family members to talk to, they still need to get connected to people aside their families. According to them, having connections with relevant people is very important in this information age world. To them (participants), they stand to gain profoundly as those network created through the KouvolaMemory Association project. The respondents had this to say when they were describing the kind(s) of social support available to them within the framework of KouvolaMemory Association project.

*"As women, we really need some form of affection in our daily live, this is not the case due to the changes in social systems where there is limited time to share knowledge with family and friends, The memory association is filling this emptiness created"*

*"Even though I have a stable job, my work is such that I always have to work alone with only little opportunity to communicate with the outside world. The association has given me the opportunity to get myself somehow connected to the people around".*

The immediate excerpts taken from the respondents prove that, there is a strong presence of social integration or network support at the Kouvola memory association. The activities of the association based on the data analyzed shows that, the association (Kouvola Memory Association), takes social integration or networking support as very critical to memory health promotion. To this end, the association, the respondents asserts, is always spearheading a meaningful connections for the participants. According to the respondent, social integration or network support remains indispensable in an effort to achieve their common course of memory well-being.

## 6.5 Esteem support

It became more recognizable from the respondents of the interview that, participants in the Kouvola memory association viewed accepting individuals as to whom they are and their capabilities are important. In other words, participants in order to bolster themselves to overcome memory challenges must embrace each member without looking down on their competence (Sarason et al, 1990). Most of the respondents shared their opinions on how members see themselves and work towards embracing one another. According to the respondents, there is a greater support in relation to esteem support such that, all participants feel free in all activities embark on by the Kouvola memory association. For example, respondents talked about being able to express their opinion during discussions and lecture session organized by the association and their views tolerated by participants. Excerpts to back the claim of the respondent are shown below when they were asked how they see themselves in the group:

*"Easy to speak and express my frank opinion without feeling intimidated during lectures and discussion sessions organized by the association"*

*"I am able to let others listen to me and my age makes me more belonging to the group".*

These immediate excerpts above are no different from other responses from the interviewees. In other words, there was no divergent opinion by the respondents which goes to prove that, among the kinds of social support that are available to the participants, esteem support is very much available. There is perceived sense of good atmosphere existing in the association thereby creating the enable environment for esteem support to thrive according to the interviewees.

## 6.6 Tangible aid

Tangible aid which in simple term means getting material support such as financial support from individuals or group (Sarason et al. 1990) received no confirmation of its existence in the Kouvola memory association. The respondents based on the data analyzed talked about going on camping in forests outside their homes on occasional basis, but never mentioned any situation where participants offered any concrete or tangible aid to colleagues. Also, they neither mention the association giving tangible aid to participants who may be in need. What was noted from the data analyzed was the fact that participants in most situations get tangible support from family members. They (respondents) claim to getting concrete support from their children and husbands in their dire need in relation to the subject under discussion. Below are some of the excerpts of the responses to the question linking tangible aid concerning kind(s) of available social support:

*"I get support such as cleaning, cooking and helping me with everything from my daughter and husband. I am more than a foreman in the house".*

*"My family (husband and sister) support me financial when I need help. But in most cases like many other Finn, I normally go for credit from the bank".*

Even though the excerpts confirms the non-existence of tangible aid the Kouvola memory association setup, this result is inconclusive. There were no further probing question to the respondents as to whether the association offer tangible aid when sought. Respondents did not mention being turned away by the association in seeking tangible aid from it. Lastly, there were no questions directed at the service providers to ascertain the availability of tangible aid to the participating individuals when needed in difficult moments.

## 6.7 Informational support

In terms of the availability of informational support in the Kouvolan memory association, there were huge approval of its existence and availability to participants. All the respondents interviewed seem to have based their presence in the association on informational support that they stand to gain concerning memory health promotion. In short, the result shows that, there are uninterrupted activities the makes informational support. Respondents talked about various means through which they get information concerning memory health promotion which forms the core reason for joining the association in the first place. Among the many ways of getting informational support according to the respondents were through lectures, discussions, sporting activities and in some instances, one-on-one interaction.

According to the respondents to the interview questions, the association makes it possible for them (participants) to have interaction with health experts such as doctors in memory health promotion. Apart from the expert's support in the area of informational support, it was also clear from the results that, another important way that made informational support available to the participants was sharing information among participants themselves. Based on the data analyzed, participants for example shared vital information about how they have been managing their lifestyle in order to stay healthy and prevent future occurrence of memory loss. They (respondents) share even sometimes confidential or personal issues just as to create some form of awareness as some of them claimed. Three of the selected responses from the interviewees in this empirical study are:

*“Memory health association offer women who see themselves as prone to memory loss as they age to get better information on how to deal with it through up-to-date information sharing”.*

*“We get important information from the association about how to keep our memory active as we grow old.*

*“It is one of the best point for people to get vital information on how best one can maintain or prevent memory related illnesses”.*

The above excerpts clearly show that, informational support is embedded in the activities of the Kouvolaan memory association. This has given the participants the opportunity to receive vital information to support their quest which is memory well-being. The informational support available to the participants is among other things, one of the motivating factors which made most of the people to join the association. The availability of informational support to participants has not only helped them (participants in the association), it also holds the key to the association very existence and achieving its set goals.

#### 6.8 Perceived memory association impact on social support

In this empirical study carried out using qualitative case study approach, respondents who are active participants in the Kouvolaan memory association were asked about the impact of the association on their memory health. The respondents gave a very positive endorsement of how the association has impacted on their lives. The most reoccurring assertion about the perceived impact of the Kouvolaan memory association in the data analyzed were: bolster of self-confidence, making new contacts, change of habits, information sharing, and psychological empowerment.

According to the respondents interviewed the activities of the Kouvolaan memory association has helped to improve their self-confidence level as individuals. The creation of a dialogue platform for the participating women has open up opportunity for them actively engage with each other making them more confident when giving a thought on issues. To back this claim of the perceived impact of the association on memory health is the excerpt below:

*“I now feel more active as my self-confidence level has grown when compared to before joining the association”.*

Connecting to new people is another perceived impact of the Kouvolaan memory association on social support. In other words, social integration or network support as found as one of kinds of support existing in the association is working well. According to the respondents, the association has enabled them to get connected to new people they claim is having a positive influence in their lives. Most of the respondents talked about how they felt lonely before

joining the association due to limited social network they had. This is what one of the respondent said in confirming the perceived impact of the memory association on social support:

*“As women, we really needs some form of affection in our daily lives, this is not the case due to the changes in the social system where there is limited time to share knowledge with family and friends. The memory association is filling this emptiness created”.*

Another perceived impact of Kouvolan memory association identified in the data collect is *change of habits* of some of the participants. According to the some of the respondents, they were engaged in some habits that were inimical to the general well-being and for that matter, their memory health. Through the intervention of the association, habits such as smoking and not exercising regularly have been dealt with. When the respondents were asked how the association has impacts on their lives one of the respondents for example said:

*“I have for example quit smoking after joining Kouvolan memory association”.*

It is also worth noting that the study identified *information sharing* as one of the perceived impact of Kouvolan memory association. All the respondents claim that their biggest benefit from the association is getting and sharing most relevant information to on memory health promotion. According to them (respondents), their general well-being has been greatly influenced by the association’s objective to give them access to vital health information. Also, the association has offered them the opportunity to share personal life store. They claim it has help most of them to understanding some changes in their lives as they are growing old. The point is, participants in the Kouvolan memory association are of different age levels and so have different life experiences in most cases. Two of the respondents had this to say in relation to information sharing:

*“We are able to discuss and share information and ideas on how to deal with personal but troubling issues affecting our lives”.*



*“We get important information from the association about how to keep our memory active as we grow and share information on how to also quit bad habits”.*

The last but not the least about the perceived impact of Kouvolaan memory association on social support of participating women is psychological *empowerment*. The results from the data analyzed reveal a positive impact of the association in terms of psychological empowerment of the participating women. Most of the revealed that, they have been made to understand that, there are more serious health problems that have been affecting people but with a positive attitude, many have overcome them. Individuals in the openness to share with members have psychologically empowered them never to give up on their quest to remain healthy or reduce the risk of being affected with memory diseases.

## 7 CONCLUSIONS

This empirical research as stated in the introduction part of the study, attempts to examine the kind(s) of social support available to participating women in the Kouvolaan memory association and its perceived impact on the women. In attempt to achieve the research objective, literature or theoretical review concerning the concept of social support was thoroughly explained. In this way, stakeholders in the memory health promotion can get meaningful information on how the intervention strategies are working.

Concerning the kind(s) social support available to participating women through the activities of the Kouvolaan memory association, basing the study on the five kinds of social support (Sarason et al. 1990), four of them were prominently available to the women. The four kinds of social support that are available to the women are; emotional support, social integration or network support, esteem support and informational support. Among the four social supports identified to be available to the women, informational support appears to be the most sought for in the activities of the Kouvolaan memory association.

Discussions and lectures offered by health practitioners from different fields features most in all the activities of the association. Social integration or

network support also shows that, participating women in the association genuinely wants to build meaningful connection with people who share the same concern with in health related matters. Not only that, the social integration or network support goes beyond making ordinary connections but professional ones that enables them to connect to appropriate institutions also. For example, there are in most cases follow-ups by the women to have individual discussions with health practitioners who lecture them through the association's activities.

Esteem support and emotional support are in parallel based on the findings in this study. Participating women in the Kouvolan memory association stressed how members (the women) accept one another with a high degree of dignity which in effect offer them emotional support. In other words, being accepted into the association alone fills the emotional needs that they may lack as result of the non-existence of social integration due to changes in the social system. Tangible aid (support), even though could not be identified in the kinds of social support available, this is not to say it is absolutely absent. There was no further probing in the case of this research to confirm or deny its availability in the association.

In relation to the perceived impact of the Kouvolan memory association on social support which is the main focus of this research, the findings show a strong positive impact. The respondents through the questions asked, give a very positive feedback about how they feel about the whole project. Their reaction to the last question (see appendix I) alone explains the perceived impact of the association on social support. Through the activities of the association, respondents explain how they have been able to establish new social contacts in their lives. The positive aspect from the social contact is that, aside their immediate families, they have other people to turn to when the need be. This also shows that, despite changes in the social integration system due multiple reasons, it is still vital for healthy living within the human race. In other words, social isolation creates boredom which may contribute to stressful feeling and affect negatively, memory health.

There is greater opportunity for a group set goals and activities to change the individuals whose habits goes contrary to the visions and aspirations of the group. The Kouvolan Memory association is a clear example to this claim.

Habits such as, smoking and drinking of alcohol were among things that participants educated on in relation to mental health promotion. Through this vital lecturing and information sharing few individual as the finding reveals, stopped smoking for example. What is evident here is that, the association through the health belief model (HBM) has been able to achieve more than just promoting memory health amongst these women.

One most observable thing about all the achievements enumerated above was as result of perceived susceptibility of the individuals participating in the project. Even though the project in the first place was to promote memory health, the decision to take on such a project was based on high cost involving dealing with memory illnesses. But then, people knowing how susceptible they are to memory illnesses is what influences them to join the project.

In summary, the Kouvolan memory association has embraced almost all the kinds of social support needed to promote memory health consciously or otherwise. The association's perceived impact is positive in all aspects of social support concept. They (participants) boast of example, having become more confident in their daily life activities through psychological support activities organize by the association.

## 7.1 Policy implications

The study findings even though might come late in terms of this project, it may serve as a guide in similar projects that will be initiated in the near future. The implications for this important project are immense in relation to memory health promotion. Policy makers, the ministry of social affairs and health, NGOs who have the interest of promoting memory health must take the following notes into consideration.

Participants in the Kouvolan memory association can be trained to become advocates of memory health in their families. This is possible because, most of the participants in the result analysis talked about how most their family members inquire from them how they feel being in the project. The participants have learned a lot of dos and don'ts in memory health promotion

and are knowledgeable enough to pass on what they have learned so far to their immediate families.

Under this memory health project, individual who feels susceptible to memory diseases feel more comfortable to open-up to other people who fell same instead of using medical facility. In other words, there is no need of booking time and in most stressful situation, waiting in a queue to have access to a medical doctor.

Another key implication of the Kouvolaan memory association is the filling the gap of social integration or network support which is seen as societal challenge today. People or women who may be living isolation not as result of their own decision have the opportunity to connect with the outside world. This is very critical as one way to combat loneliness which seems to be prevalent in this part of our world (Europe) due to various reasons.

The last but not the least in relation to the implications of the Kouvolaan memory association project is the trickle-down effect on health in general. Participants engage in many activities which does not only promote memory health but general well-being. These activities which including physical exercises may lead to combating cardiovascular diseases.

## 7.2 Recommendations

The study aside the above stated implications of the Kouvolaan memory association project, recommends that following is taking into consideration in the near future. The project implementers should consider including men in subsequent actions in relation to memory health promotion. Through that, men can also have access to relevant information concerning memory health. Also, memory health promotion help desk should be created in the event of facing-out the project to for continuity. Most of the respondents' answers to question showed empty they will be when the project comes to an end.

In addition to the above, this study recommends future research in what promotes trust among members in memory health associations to maintain effective group cohesion and harmony. This is important because, it was one

of the issues outlined by most respondents but the research failed to probe in this regard.

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## Interview questions

### Demography

Please fill in your age in the appropriate space provided for below, and then circle the correct answer that matches with your personal status from the given answers;

AGE: .....

#### A. MARITAL STATUS

a1. Married or co-habiting

a2. Unmarried

a3. Divorced or legally separated

a4. Widow

#### B. EDUCATION

b1. National school only

b2. Primary or secondary school

b3. Vocational school

b4. College level education

b5. Institute graduate

b6. Polytechnic education/University

b7. None of the above

#### C. EMPLOYED

c1. Employed

c2. Unemployed

### c3. Pensioner

1. Please, how long have you live in Kouvula or Kotka region?
2. What motivated you to enroll in the Kouvola Memory Association?
3. Please, do you consider memory health association having a meaningful impact on general mental health promotion of people? If yes, how and if on, why?
4. Can you tell about your mental state of health before and after joining the memory association?
5. What activities have you being doing together as participants in the association?
6. Have those activities in your estimation help to bring the participants of the association which you are included together? If yes, how?
7. How do you identify yourself in the group?
8. Please can you mention who are very important to you apart from the participants in the association?
9. Why are they so important to you?
10. Do you get some form of support from those names mentioned, in your pursuit of sustainable mental well-being? If yes, what kind(s) of support do you get from them?
11. How can you describe the support that you get from the names mentioned and that of the memory association?
12. How has the Kouvola Memory Association affected your mental health at the moment?
13. If the programme is to end today, how will you feel and why?

## Sample of data analysis

Sample of data Analysis of some selected interviewee's responses

1. Please, how long have you live in Kowulu or Kotka region? 1. I have been living in Kotka for the past 20 years. 13. I been living in Kowulu for my entire life. To be precise, 61 years. 37. I have been living in Kotka region for the past 8 years.	
2. What motivated you to enroll in the Kowulu Memory Association? 38. My father had Alzheimer disease and the opportunity to meet women of my age. 50. I am motivated by getting help from the association and also the desire to live a healthy life. 62. I am motivated by getting help from the association and also the desire to live a healthy life. 86. I am motivated by getting help from the association and also the desire to live a healthy life. 110. Curiosity and my understanding that brain memory health information is really important at my age.	<p>godfred adduow obeng Stress and coping and social construction perspective</p> <p>godfred adduow obeng Social constructionist perspective</p>
3. Please, do you consider memory health association having a meaningful impact on general mental health promotion of people? If yes, how and if on, why? 111. Yes. They provide us basic information on memory health promotion. 27. Yes. They give people the chance to do self assessments pertaining to memory health promotion. 51. Yes. It is one of the best point for people to get vital information on how best one can maintain or prevent memory related illnesses. 63. Yes. As women, we really need some form of affection in our daily live, this is not the case due to the changes in social systems where there is limited time to share knowledge with family and friends, The memory association is filling this vacuum created.	<p>godfred adduow obeng Positive impact (informational support)</p> <p>godfred adduow obeng Positive impact (motivation)</p> <p>godfred adduow obeng Positive impact (social integration /network support)</p>
4. Can you tell about your mental state of health before and after joining the memory association? 4. There is no difference in my mental health status before and after joining the Memory Association. Maybe I am now more conscious of what I need to do to keep my memory more active. 16. I was almost all the time experiencing fatigue and stress before joining the association but that cannot be said today. The stress is minimal as I speak to you now. 52. I now feel more active, my self-confidence level has grown and a place to go after work or when I am free. 88. There is no difference in my mental health. 112. Feeling more confident about my self by learning new things.	<p>godfred adduow obeng Less stress</p> <p>godfred adduow obeng Active, self-confidence boost</p> <p>godfred adduow obeng Active brain</p>

5. What activities have you been doing together as participants in the association? 5. We have been doing physical activities by going to the gym, laughter yoga, attending lectures, and most other times too, having informal discussions. 29. We do discussions and attend lectures which are presented by health practitioners like nurses and doctors. 77. Discussions, lectures, homework, life compass, personal discussion and physical activities eg. Swimming. 101. Lectures, laughter yoga, physical activities eg. Walking around ring bells, and going on camping.	godfred adduow obeng Physical activities godfred adduow obeng Discussions and lectures and personal discussions godfred adduow obeng Brain test, social activities godfred adduow obeng Lectures, physical activities
6. Have those activities in your estimation help to bring the participants of the association which you are included together? If yes, how? 78. Yes. There is active participation of members in all events that are carried out by the association. 54. Yes. We talk to each other on personal issues. Easy to talk to each other though strangers in some extent, there is trust among us. 42. Yes. Trust among us as a group is high, therefore giving us a genuine cause to come together. 102. Yes. It has helped us to freely share issues bordering us in relation to memory health.	godfred adduow obeng Active participation godfred adduow obeng Solid group traction godfred adduow obeng Information sharing
7. How do you identify yourself in the group? 79. I am able to let others listen to me and my age makes me more belonging to the group. 55. Talkative, good listener and feel belonging to the group. 7. Easy to speak and express my frank opinion. 19. I do identify myself in the group as a talkative in expressing myself.	godfred adduow obeng Commanding respect and influence godfred adduow obeng Recognition godfred adduow obeng Great speaker
8. Please can you mention who are very important to you apart from the participants in the association? 20. My daughters, husband and friends are the most important people in my life. 32. My children and close family relations like my sister and her children are very dear to me. 56. My husband is the most important person to me apart from the members who are with me in this association. 117. Almost everybody who comes into my life is important to but I will say that, my husband, daughter, family, sister in law and working colleagues are the most important people in my life.	godfred adduow obeng Nuclear family and acquaintances godfred adduow obeng Children and close family godfred adduow obeng Nuclear family, friends, working colleagues and acquaintances
9. Why are they so important to you? 81. They are important to me because, they do offer me an unconditional moral support and beside, I feel safe with them (security). 69. I live with them everyday if not for a reason, of example travelling and are interested in everything I do. The best part of it is that, they makes life easier for me. 57. My husband understands my way of doing things and he is lovely. 33. They are important to me because I do a lot of funny things with them and also due to the blood relation.	godfred adduow obeng Emotional support godfred adduow obeng Esteem support godfred adduow obeng Social integration
10. Do you get some form of support from those names mentioned, in your pursuit of sustainable mental well-being? If yes, what kind(s) of support do you get from them? 34. Yes. They are always there to offer me all kinds of supports including psychological support when I feel lonely. 21. Yes. The encourages me to do what I am doing. They respect my opinion and we do things together. 118. Yes. My husband encourages me in all that I do. 82. Yes. Motivating me in doing things which promotes or enhance my general well-being. 70. Yes. Clean, cook and helping me with everything I am more than a foreman in the house. They also motivate me to get mentally fit.	godfred adduow obeng Emotional support godfred adduow obeng Esteem support godfred adduow obeng Emotional support godfred adduow obeng Tangible aid
11. How can you describe the support that you get from the names mentioned and that of the memory association? 22. The two supports are inseparable, very important and valuable which I do appreciate. 59. It is possible to discuss issues with both whiles they makes things such a way that, I trust their sense of judgement and honesty in my quest to achieve good memory health. 71. They both help to see things from different perspective. They have made me to understand that everyone has a problem. 35. Both supports are very essential to me.	godfred adduow obeng Genuine support godfred adduow obeng Positive support godfred adduow obeng Positive support
12. How has the Kouyaleh Memory Association affected your mental health at the moment? 12. The association has positively affected my mental health. 36. I will say its been positive. I have build some form of self-confidence which is enabling me to do things with ease. 120. The association has positively affected my mental health through the awareness creation and most importantly, being able to share ideas with people that I share the same concern in relation to memory health. 96. The association has help me to know the dos and don'ts to keep me mentally sound.	godfred adduow obeng Positive impact/ building of self confidence godfred adduow obeng Positive impact/ awareness creation godfred adduow obeng Positive impact godfred adduow obeng Positive impact/ good habit practices

13. If the ~~programme~~ is to end today, how will you feel and why? 13. I will be sad. Because, it provides a platform to share and learn from our personal experiences, and get knowledge from experts. 61. I will be sad because, I will not be able to meet women as we normally do in the association activities and share ideas. 109. Sad. It has become part of my life. The support we receive from the program is immeasurable. It's a kind of social bonding to me. 133. I will feel bad because it may let some of us go back to our bad ways which affect our memory health.