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The Impact of Attending Social Support Groups on Levels of Resilience in Older Adults.

Rachel O'Callaghan,

16405046,

2019.

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The Impact of Attending Social Support Groups on Levels of Resilience in Older Adults,

Rachel O'Callaghan

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Student Number: 16405046

Degree for which thesis is submitted: BA (hons) Psychology

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Signature of research student: Rachel O'Callaghan

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Abstract

Resilience is defined as a trait or process that facilitates positive adaptation in the face of adverse events. Studies investigating resilience in older adults are sparse, but the existing literature suggests that psychological resilience might increase with age, and that resilience is positively associated with mental and physical health. Social support has been identified as one predictor of resilience, but to date research in this area has focused on social contact with family and friends. The main aim of the current study was to determine if after controlling for social support from family and friends using the Lubben Social Network Scale (LSNS-6), would frequency of attendance to social support groups be a predictor of resilience scores in older adults, in Ireland. A quantitative cross-sectional design was used. A convenience sample of 59 older adults (age range 65-90 years; M = 75 years, SD = 7.2; 52.5% female) were recruited from four social support groups across Kildare and Cork and through social media pages. Participants completed the Lubben Social Network Scale (LSNS-6), the Resilience Appraisal Scale (RAS) and a self-report questionnaire which measured demographics and frequency of participation in social support groups. Results found that only social support from family and friends was a significant predictor of resilience. The findings have important potential implications for the design and evaluation of interventions to promote both resilience and social support in the ageing population

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The Impact of Attending Social Support Groups on Levels of Resilience in Older Adults

The aging population is growing at a rapid paste. According to the World Health Organization, it estimates that between 2015 and 2050, the population of those 65 and over, will nearly double (WHO, 2015). Furthermore, the latest Irish census of 2016 reported that the population of those 65 and over, rose by 19% since 2011 (CSO, 2018). Research suggests that as we age, we encounter many difficulties, both physical and mental. Physically, older adults have been shown to have an increased risk of developing a chronic illness, such as heart disease, diabetes, hypertension, cancer and arthritis (Avendano, Glymour, Banks & Mackenbach, 2009; Chodosh et al., 2005). Those 65 or over have also been found to encounter challenges concerning their mental health such as emotional distress, for example, due to a loss of a loved one or lack of support (Hildon, Smith, Netuveli & Blane, 2008; Wells, 2009). Research shows that the older adult population has an increased risk of reporting feeling lonely and often show increased depressive symptoms (Singh & Misra, 2009; Theeke, 2009). Despite facing such challenges, evidence shows that older population is not only increasing in size, but are also living longer, with life expectancy rates showing a 30-year increase across western Europe (Christensen, Doblhammer, Rau & Vaupel, 2009). While research heavily focuses on the negatives of the aging population, the positives of a growing adult population are often overlooked. For example, it is suggested that the increasing older adult population may lead to a more educated and productive workforce due to competitiveness' and a need for higher education attainment (Kluge, Zagheni, Loichinger & Vogt, 2014). With the aging population growing at such a fast rate, there is a clear need for additional physical and mental health services that cater for the older adult population in order to help maintain an overall positive quality of life.

Defining and Measuring Resilience

The concept of resilience is difficult to define and has many different definitions across research. The American Psychological Society (2018) defines resilience as one's ability to 'bounce back' from adversity or stress, more specifically, resilience can be defined as "the process of adapting well in the face of adversity, trauma, tragedy, threats or significant sources of stress (para.4).". Ong and colleagues (2009) reefer's to resilience as an individual's ability to cope with stress while still maintaining normal functioning. Historically, interest in researching resilience began among the younger population concerning successful children who would have been considered a high risk for negative developmental factors (Masten & Reed, 2009; Ong, Bergeman & Boker, 2009; Werner, 1995). There is disagreement among researcher as whether resilience should be viewed as a set of traits, a process or an outcome (Olsson, Bond, Burns, Vella-Brodrick & Sawyer, 2003). However, while there are many definitions of resilience, research generally views resilience as a personality characteristic or trait which helps one cope with stress and promote positive adaptation after stressful events (Lavretsky & Irwin, 2007; Ahern, Kiehl, Lou Sole & Byers, 2006). Resilience is also viewed as something that can be learnt throughout life, due to developing skills that helps one cope and deal with adversities they may face throughout their lifetime (Hildon, Smith, Netuveli & Blane, 2008). There are no single accepted or agreed upon components of resilience, however measuring resilience generally concerns capturing one's personal competence, ability to cope and accept change, social support and family networks along with quality and purpose of life (Connor & Davidson, 2003, Johnson et al., 2010). Wagnild and Young (1990) identified five components that constitute resilience in older women, these being; a balanced perspective of one's life and experience, a willingness to continue to reconstruct one's life and to remain involved, a belief in oneself, an understanding that life has a purpose, and lastly

a realization that each person's life path is unique. Various scales have been developed in order to measure one's resilience among various populations, both clinical and general, some of these include the Resilience Scale, the Connor-Davidson Resilience Scale (Connor & Davidson, 2003), the Resilience Scale for Adults (Friborg et al., 2003) and the Resilience Appraisal Scale (Johnson et al, 2010).

Resilience and Aging

More recently, research surrounding the older adult population and resilience levels has emerged and it suggests that in general older adults are said to show high levels of resilience. Evidence suggests that older adults show higher levels of resilience when compared to that of younger adults (Gooding et al., 2012). A study carried out by Gooding, Hurst, Johnson, and Tarrier (2012) comparing 60 young adults (ages 18-25) and 60 older adults (aged 65 plus), found that younger adults showed lower levels of resilience as compared to those 65 and over. Using the Resilience Appraisal Scale (RAS) (Johnson et al 2010) which consists of three subscales including social support, emotional regulation and problem-solving abilities, this study, found that while the older adults showed more resilience with regards to emotional regulation and problem solving, the young adults showed stronger resilience scores in relation to social support. While this study was the first to compare resilience across age, high resilience scores among the older population are not uncommon (Wells, 2009; Nygren et al., 2005; Wagnild & Young 1993). Wells (2009) found that participants aged 65-94, showed a mean score of 149, out of a maximum score of 175 using the Resilience scale (RS) developed by Wagnild & Young (1993). Furthermore, research suggests that resilience increases with age and is highest among the oldest old. Research carried out by Nygren and colleges (2005), which consisted of 125 adults aged 85-95 plus, set out to describe resilience in relation to perceived physical and mental health among the oldest old (85 plus).

Results found that adults 85 and older showed higher scores on the Resilience Scale (RS) (Wagnild & Young, 1993). as compared to younger adults, with those aged 95 and older showing the highest scores. This finding has also been confirmed by Netuveli and colleges' (2008), who found that those 75 plus showed higher levels of resilience compared to those aged 50-74. While evidence suggests there is an association between resilience and the oldest old, there is a clear need for more research to confirm the reliability and validity of these findings.

Resilience and Positive Health Outcomes

Resilience has been found to be related to many protective factors when it comes to positive aging (Shen and Zeng, 2010; Wells, 2009). One study found that high levels of resilience reduced mortality rates by almost 6% (Shen and Zeng, 2010). Another, two studies have found that having high resilience levels can predict positive mental and physical health in older adults (Mehta et al., 2008; Nygren et al., 2005; Wells, 2009). Windle, Woods, & Markland (2009) found that high levels of resilience seemed to moderate the impact of ill health among 1800 individuals aged 50-90 years old. Research also suggest that resilience scores are significantly associated with depression scores among those aged 65-85 (Mehta et al., 2009). With evidence suggesting that having high levels of resilience produces positive physical outcomes for older adults, there is clear importance in creating interventions that promote resilience among the older adult population.

Resilience and Social Support

Since high levels of resilience seem to produce positive health and mental outcomes for older adults, researchers have gained interest in identifying what factors may contribute to resilience, in order to develop affective interventions to increase resilience and especially for those less resilient. Several contributing factors have been identified with regards to high levels of resilience in older adults, these include social support, integration and involvement within their

community (Hildon, Montgomery, Blane, Wiggins & Netuveli, 2009, Netuveli, Wiggins, Montgomery, Hildon & Blane, 2008). Like resilience, social support has many definitions, however, in general it refers to "a social network's provision of psychological and material resources intended to benefit an individual's capacity to cope with stress" (Cohen, 2004). A mixed method design study carried out on a sub sample of the Boyd Orr cohort study, which consisted of 139 older adults between the ages of 70-80, found that those with high levels of resilience had reported having good social support from family and friends (Hildon, Smith, Netuveli & Blane, 2008). Having high levels of social support networks is suggested to increase resilience levels by almost 60% as compared to those with less social networks (Netuveli, Wiggins, Montgomery, Hildon & Blane, 2008). Another mixed method study carried out on men that had recently been widowed found that social support contributed to achieving resilience after the loss of a spouse (Bennett, 2010). A more recent study carried out by Sharifian & Grühn (2018) looked at the impact of social support versus social participation and its impact on psychological wellbeing in older adults. Social support refers to acts performed for an individual by others, such as help with a problem being faced whereas social participation refers to a person's involvement in activities with others for example, having dinner with friends or attending book clubs (Sharifian & Grühn, 2018; Levasseur, Richard, Gauvin, & Raymond, 2010). Data was collected over 3 points in times, across a total of 19 years where the sample was aged 51- 56 during the first point of collection and 70 – 74 during the last. Results from this study found that those who reported higher levels of social participation were less likely to show declines in psychological well-being (Sharifian & Grühn, 2018).

Social Support Interventions

Research would suggest that high levels of social support are associated with high levels of resilience among older adults. However, for many older adults, social support and participation might not be assessable or encouraged, due to a lack of support network or lose of close friends. Research shows that older adults who live independently are often at risk of becoming socially isolated (Findlay 2003; McHugh, Lee, Aspell, Lawlor & Brennan, 2015), thus interventions to improve social support are essential. Support interventions are based on the theory that increasing support enables people to better cope, and so will result in fewer psychological or physical symptoms (Cohen & Wills, 1985). Examples of social support interventions previously employed mainly include befriending programs in the form of telephone support services, peer and group support groups (Hogan, Linden, & Najarian, 2002; Lester, Mead, Graham, Gask,, & Reilly, 2012). However, there seems to be a lack of evidence that such interventions significantly increase one levels of perceived social support (Findlay, 2003; Lester, Mead, Graham, Gask,, & Reilly, 2012). It is also suggested that the most successful interventions often include the incorporation of leisure activities (McHugh, Lee, Aspell, Lawlor & Brennan, 2015; Toepoel, 2012). There are various social support groups around Ireland that target the older population. These include Active Retirement Ireland, The Men's Shed Association, and various other community run social clubs. These groups encourage social participation, offer leisure activities such as day trips and encourage positive aging. For example, the Men's Shed Association annual report, found that nearly 100% of their members across 52 sheds reported that it was a place where they felt they made new friends and social connections (Carragher, 2003). Reports like such are scarce and to the researcher's knowledge there seems to be a lack of scientific evidence on the impact of such social groups.

Overall, older adults seem to show high levels of resilience compared to younger adults. Research suggest that having a close social network assists resilience in older adults and can lead

to many positive effects such good physical outcomes, positive aging and overall mental health (Mehta et al., 2008; Nygren et al., 2005; Wells, 2009). Seeing as social support seems to have a positive effect on resilience in older adults, one would suggest further research investigating the impact of attending social support groups on resilience levels in older adults.

Rationale, Research Aims and Hypothesis

Based on current research, evidence shows a relationship between resilience in older adults and having a good social support network from both friends and family (Hildon, Montgomery, Blane, Wiggins & Netuveli, 2009; Hildon, Smith, Netuveli & Blane, 2008; Montross et al., 2006). Furthermore, a number of studies have found a relationship between good mental and psychical health and resilience in older adults (Mehta et al., 2008; Nygren et al., 2005; Wells, 2009). Not all older adults have access to a strong social support group from family and friends, with research suggesting that older adults often feel socially isolated, thus interventions to improve social support networks have been developed (Hogan, Linden, & Najarian, 2002).

However, to the researcher's knowledge, no studies have been carried out targeting the impact of attending social support groups on resilience in older adults. With the aging population increasing in size, in Ireland and globally, providing effective supports for older adults is essential. Social support groups for older adults across Ireland include groups such as Active Retirement Ireland, The Men's Shed Association, social meet up clubs and various other community run groups. Groups like such are set up to support older adults in keeping active as they age. It is clear such groups serve importance and are in demand, with Active Retirement Ireland alone having almost 550 groups across Ireland (Active Retirement Ireland, 2019). The proposed research aims to investigate the impact of attending such groups has on resilience, as research would suggest social support has a positive effect of resilience. Understanding the impact of such groups is essential for further support services and interventions for increasing resilience in general and for those less resilient.

Existing literature suggests social support has an impact on resilience levels in older adults (Hildon, Montgomery, Blane, Wiggins & Netuveli, 2009; Hildon, Smith, Netuveli & Blane, 2008; Montross et al., 2006), however no research has covered the impact of attending social supports

on resilience in older adults. The current study will therefore investigate whether attendance to social support groups is associated with high levels of resilience among older adults in Ireland. The main objective of this study is to determine if after controlling for social support from family and friends using the Lubben Social Network Scale (LSNS-6), does high frequency of attendance to social support groups still have an association with higher resilience scores in older adults, in Ireland.

This research study proposes two main aims. firstly, to investigate the relationship between attendance at social support groups and resilience among older adults, while controlling for the effects of social support from family and friends. Secondly to investigate the relationship between age and resilience among adults aged over 65 in Ireland. Based on these aims the researcher proposes three hypotheses, firstly, there will be a positive relationship between age and resilience scores. Secondly, that there will be a significant relationship between frequency of attendance to social support groups and resilience scores. Lastly, that after controlling for social support from family friends, frequency of attendance to social support groups will be a significant predictor of resilience scores.

Method

Participants

A total of 61 participants were recruited using opportunity sampling methods. Inclusion criteria included being aged 65 or over. As the older adult population is vulnerable to cognitive impairments such as, dementia, which may affect their ability to give informed consent an exclusion criterion of any cognitive impairment that may affect one's day to day life was employed. A total of 59 questionnaires were included in the analysis, due to not meeting the age inclusion criteria and incomplete measures. Participants were 47.5% male and 52.5% female with ages ranging from 65-90 years old (M = 75 years, SD = 7.2).

Measures

In order to assess how often participants, attend social support groups, a 5-point Likert scale was created. Respondents were asked to state how often they attend social support groups, firstly over the last month and secondly over the last year, with the possible answers being: never, rarely, sometimes, often and very often. A total score was obtained by summing each response with 0 being never and so on. In order to be sure that participants self-reported frequency of attendance was reliable, participants were also given the opportunity to write or type the exact numbers of times they attended such groups over the last month and year. For the purpose of analysis participants self-report of monthly frequency to social support groups was used.

Participants' levels of social support from family and friends was measured using the shorten Lubben Social Network Scale (LSNS-6) (Lubben at al., 2006). This 6-item scale is used to measure levels of social engagement by assessing individuals perceived social support from both their family and friends. It aims to assess the size, closeness and the quality of one's social network by asking six questions, three concerning family members and three concerning friends.

For example, "how many family members can you ask for help" or " how many friends do you feel you can talk to about private matters". Respondents are asked to circle an answer ranging from 0-1 with 1 being none, 2 being one, 3 being three or four, 4 being five thru eight and lastly 5 being nine or more. For the purpose of this study, participants were asked to write the exact number, and this was later coded. Scores on this scale range from 0-30 with higher scores suggesting higher levels of social engagement. Scores of 12 or lower are said to represent those at risk of social isolation. Evidence of internal consistency would suggest this scale meets the satisfactory requirements for the current sample (α= 0.83) (Lubben et al., 2006). Reliability test for the current sample were also run and show a Cronbach's alpha of .83.

Levels of psychological resilience were measured using the Resilience Appraisal Scale (RAS) developed by Johnson (2010). This self-report measure consists of 12-items and includes three sub-scales including: social support, problem solving abilities and emotional regulation. skills. Respondents are asked to indicate to what extent they feel each statement applies to them using a five-point Likert scale ranging from strongly disagree to strongly agree. For example, ‘I can put up with my negative emotions'. This scale has shown strong reliability, with a Cronbach's alpha of 0.88 for the overall scale, 0.93 for the social support sub-scale, 0.92 for the problem-solving sub-scale and 0.92 for the emotion coping sub-scale (Johnson et al., 2010). Reliability tests for the current sample also shows a strong reliability with a Cronbach's alpha of .88. Total scores are gained by summing item scores, 12 being the lowest and 60 being the highest possible score. There are no standardised cut off points for high and low scores on this scale however, for the purpose of this study results from Gooding et al., (2012) were used as a point of comparison.

Design

A quantitative cross-sectional, design was employed for the purpose of this research study, as data was collected from the one group at one point in time. There was one criterion variable, which was resilience, while predictor variables were age, frequency of social support group attendance and social support from family and friends.

Procedure

Participants were approached and mainly recruited using opportunity sampling methods, from four different social groups that target the older adult population, within the Cork and Kildare regions of Ireland. Permission to recruit from these groups was firstly obtained from group leaders before starting recruitment. During their usual meetings times, each individual social group was visited, where a 10-minute talk concerning the research process was given. All individuals were informed that they would need to sign an informed consent form, if they decided to take part and were reassured that their identity would be kept unidentifiable. Individuals were also informed of their right to withdraw consent at any point, up until the data analysis process had begun, which could be done by contacting the researcher by email with their name. Individual's were made aware that some questions concern their personal feelings which they may find difficult or upsetting, and so were given the option of completing it at home, along with referring them to the relevant support groups on the debriefing sheet. Each group member was also given an information sheet which included any possible questions or concerns they might have (see appendix A).

After this talk was given and all the questions were addressed, group members who wanted to take part were given the opportunity to take and sign a consent from (see appendix B), which was attached to the questionnaire. This questionnaire included three sections; Section one; About you, where participants were asked their age and gender along with asking how often they attend

social support groups. Section 2; Your family and friends, which consisted of the LSNS-6 and lastly, Section 3; Your Feelings, the Resilience Appraisal Scale (RAS) (see appendix C). Completion took roughly 10-15 minutes and questions were welcomed to ensure participants had no uncertainty about any of the questions. It was encouraged that participants fill out the questionnaire there and then however, the choice of completion at home was also given, and in this case a drop off box was left with each group. Once participants had completed their questionnaire, they were collected and were all given a debriefing sheet (see appendix, figure D). This sheet included information such as the names of the measured used, information about dissemination and the researchers email in case they wanted to obtain a copy of the final write up. All participants were once again reminded of their right to withdraw consent and were thanked for taking the time to take part in the research.

In order to try gain access to older adults who do not regularly attend such social groups, recruitment also took place online, through various social media pages. These Facebook pages included, Active Retirement Ireland, Senior Care Ireland and the researchers own personal Facebook page. This involved sharing a post which included a short summary of the purpose of the research, inviting anyone 65 or over to take part, along with an attached link to the questionnaire made on google forms. Individuals were first shown an information page, the same as the one used for face to face recruitment, where any questions regarding the research process were addressed. Once they had read the information page, individuals were required to tick a box stating that they understood the information and were happy to consent to take part, before answering any questions. This online questionnaire followed the exact same format as the one used for face-to-face recruitment. Once participants had completed each section of the questionnaire,

they were shown a debriefing page (see appendix D), where they were reminded that once they clicked submit, they would no longer be able to withdraw their consent. This page also included the relevant support groups in case any participant felt they were upset due to the nature of the questions being asked.

Results

Descriptive statistics

Frequencies and descriptive statistics were carried out on all categorical and continuous variables (see table 1 & 2). The majority of participants consisted of females and were 74 years old. When asked to report their attendance to social support groups over the last month, 55.9% of participants reported attending such groups often or very often. Participant's resilience levels were generally high (M = 47.83) with no participants obtaining the lowest possible score of 12. Overall participants showed high levels of social support from family and friends, however 25% of participants obtained a score of 12 or lower on the Lubben Social Network Scale (LSNS-6).

Table 1

Frequencies for the current sample (N = 59)

Variable	Frequency	Valid Percentage
Gender		
Male	28	47.5
Female	31	52.5
Monthly frequency of attendance to social support groups		
	10	16.9
Never	2	3.4
Almost never	14	23.7
Sometimes	16	27.1
Often	17	28.8
Very often		

Table 2

Descriptive statistics of all continuous variables

	Mean (95% Confidence Intervals)	Std. Error Mean	Median	SD	Range
Age	74.90 (73.02-76.78)	.94	74	7.22	65-90
Social Support (LSNS-6)	17.20 (15.65-18.76)	.78	18	5.96	3-29
Resilience	47.83 (45.84-49. 82)	.99	48	7.63	23-60

Note; LSNS-6 = Lubben Social Network Scale 6.

Inferential statistics

Prior to investigating the relationship between age and resilience, preliminary analyses were performed to check assumptions of normality, linearity and homoscedasticity. These assumptions were violated and so, the relationship between age and resilience (as measured by the Resilience Appraisal Scale) was investigated using Spearman rank order correlation. There was a week, positive correlation between the two variables, with no statistical significance found (r_s = .04 [95% CI = -.23 - .31], n =59, p = .744). The two variables share approximately 16% of variance in common.

Secondly, the relationship between frequency of attendance (monthly) to social support groups and resilience scores was investigated using a Spearman's rank order correlation. There was a small positive correlation between the two variables, with no statistical significance found (r_s = .22, [95% CI = -.02 - .45], n =59, p = .096). The two variables share 4.84%, of variance in common.

Lastly, a hierarchical multiple regression was performed to investigate the ability of frequency of attendance to social support groups to predict levels of resilience, after controlling for social support from family and friends (measured by the LSNS-6). Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, and homoscedasticity. Additionally, the correlations amongst the predictor variables (social support from family and friends and frequency of attendance to social support groups) were examined and these are presented in Table 3. All correlations were weak ranging between r = -.22 to .34. Tolerance and VIF values were also examined and indicated that multicollinearity was unlikely to be a problem as suggested by Tabachnick & Fidell (2013). Both PVs (social support from family and friends and frequency of attendance) were correlated with resilience indicating that the data was suitable for multiple linear regression analysis.

In the first step of the hierarchical multiple regression one predictor was entered; social support from family and friends (as measured by the LSNS-6). This model was statistically significant F (1,57) = 7.63, p = .008) and explained 11.8% of variance in resilience scores (see table 4 for full details). After the entry of frequency of attendance to social support groups at step 2 the total variance explained by the model was 14.7% (F (2, 56) = 4.82, p = .012.). The introduction of frequency of attendance to social support groups explained an additional 2.9% of variance in resilience scores, after controlling for social support from family and friends, a change that was not statically significant (R^2 change = .029: F (1, 56) = 1.89, p = .175). In the final model only social support from family and friends made a unique contribution (β =.30 p = .021) (see table 4 for full results).

Table 3,

Correlations for all predictor variables.

Variables	**1**	**2**	**3**
1. Resilience	1		
2. SS from family and friends (LSNS-6)	.34*	1	
3. Frequency of attendance to SS groups	.24*	.22*	1

Note SS = Social Support, LSNS-6 = Lubben Social Network Scale 6, statistical significance: *$p < .05$

Table 4

Multiple regression model predicting resilience scores.

	R	R^2	R^2 Change	B	SE	β	t
Step 1	.334	.118					
SS from family and friends (LSNS-6)				.44	.16	.34	2.76
Step 2	.383	.147	.029				
SS from family and friends (LSNS-6)				.39	.16	.30	2.4
Frequency of SS group attendance				.95	.69	.17	1.4

Note SS = Social Support, LSNS-6 = Lubben Social Network Scale 6.

Discussion

The main aim and objective of this study was to determine if after controlling for social support from family and friends using the Lubben Social Network Scale (LSNS-6), would high frequencies of attendance to social support groups have an association with higher resilience levels in older adults, in Ireland. The current study proposed three hypotheses, firstly, that there would be a positive relationship between age and resilience scores. Secondly, that there would be a significant relationship between frequency of attendance to social support groups and resilience scores. Lastly, that after controlling for social support from family friends, frequency of attendance to social support groups would be a significant predictor of resilience scores.

As mentioned above, it was firstly hypothesised that there would be a positive relationship between age and resilience scores among those 65 and over. Overall participants showed relatively high levels of resilience with an average of 47.83 out of a maximum score of 60. Results from the current study found a weak positive relationship between age and resilience scores. Meaning as age increased so did resilience levels. However, results found no statistical significance and so this hypothesis was rejected. These results obtained from the current sample are not in accordance with previous research that suggests resilience and age are associated (Netuveli, Wiggins, Montgomery, Hildon & Blane, 2008; Nygren et al., 2005). The current results also contradict Gooding and colleagues (2012) finding that older adults show higher levels of resilience when compared to younger adults. For instance, Gooding et al. (2012) found that on average older adults received a total score of 52 on the Resilience Appraisal Scale (RAS) (Johnson et al., 2010) and the younger population received 48. Perhaps the claim that older adults show the same levels of resilience as younger adults would be more accurate. This study has similarities to the current research such as, research design and the older adults' samples

average age. However, it is worth noting that sample size of Goodings research was larger and provided a £5 incentive to all its older adult participants while the younger sample received course credits which may have made these results vulnerable to participant bias. This study also does not provide sufficient descriptive statistics on the range of scores obtained by its sample. Furthermore, Nygren at al., (2005) and Netuveli et al., (2008) both suggest that resilience rises as we age, however comparing such results to the current sample proves difficult due to fundamental differences in methods of measuring resilience. For example, Netuveli et al., (2008) measured resilience based on adversities participants had faced and classified participants as either being resilient or not. Without a common understanding of the concept and standardised measure of resilience interpreting and applying such research will stand to prove difficult. While the current findings suggest there is no significant relationship between age and resilience as previously suggested by other studies (Gooding et al., 2012; Netuveli, Wiggins, Montgomery, Hildon & Blane, 2008; Nygren et al 2005), there is a clear need for replication in order to confirm or reject the current findings.

Secondly it was hypothesised that there would be a significant relationship between frequency of attendance to social support groups and resilience scores. Results from the current study found a weak positive relationship between frequency of attendance to social support groups and resilience scores, meaning increases in frequency of attendance to social support groups lead to increases in levels of resilience. However, results found no statistical significance between frequency of attendance and resilience scores therefore, this hypothesis was rejected. Furthermore, it was hypothesised that after controlling for social support from family friends, frequency of attendance to social support groups would be a significant predictor of resilience scores. Results from the hierarchical multiple regression show that while social support from

family and friends was a significant predictor of resilience, frequency of attendance to social support groups was not and so this hypothesis was also rejected. These results, that suggest social support from family and friends is a significant predictor of resilience are in accordance with previous research evidence (Bennett, 2010; Hildon, Smith, Netuveli & Blane, 2008; Netuveli, Wiggins, Montgomery, Hildon & Blane, 2008).

To the researcher's knowledge, this was the first study to look at the impact of attending social support groups on resilience levels in older adults and so finding a point of comparison proves difficult. It is worth mentioning, that while frequency of attendance was not a significant predictor of resilience scores it did explain an additional 2.9% of variance in resilience scores. Additionally, over half of the current sample reported attending and reattending social support groups often or very often, suggesting such groups may play an important role in their day to day activities. While attending social support groups may not directly or significantly affect resilience levels, as found in the current research, attending such groups may affect other aspects of older adults' lives that were not measurable within the parameters of this research study. For example, Sharifian and Grühn, (2018) carried out a longitudinal study, across three points in time over 19 years, to investigate the differential impact of social support and social participation by assessing the number of times participants went out and carried out activities with both family and friends. Results found that those reported high levels of social participation showed higher levels of psychological wellbeing. Furthermore, Wang and colleagues (2002), found that participants who reported regularly attending social activities such as going out with friends or attending a pension organisation were roughly 40% less likely to develop dementia compared to those who reported not partaking in such activities. With research suggesting that having strong

social network can have positive effects on cognitive and mental wellbeing (Sharifian & Grühn, 2018; Wang, Karp, Winblad & Fratiglioni, 2002), further research investigating the effect of attending social support groups on both physical and mental health aging outcomes would be beneficial in order to further understand the impact attending such groups has on older adults' lives.

Limitations

Although the current research sheds light on the importance of social support from family and friends and the impact of attending of attending social support groups in relation to predicting resilience scores, there are limitations. The current study was cross-sectional in design and so no casual relationships can be made, nor can these results be generalized to the general population of older adults in Ireland. While it may be the case the social support from family and friends are a significant predictor of resilience and frequency of attendance to social support groups are not, further longitudinal research is needed in order to confirm or deny these results. Additionally, recruiting older adults who do not attend social support groups proves difficult and it should be noted that only 16.9% of participants from the current sample had reported never attending social support groups. Further research investigating a wider a range of older adults who do not have access to social support from both family and friends and groups would therefore be beneficial. Lastly, participants were asked to self-report their frequency of attendance to social support groups by stating whether they attended such groups never, rarely, sometimes, often or very often, over the past month and so the exact frequency of attendance was not obtained. A more reliable method of measuring social support group attendance could have

been employed in order to get a clearer idea of exactly how often the current sample attended such groups.

As mentioned above this study was cross sectional in design and so casual relationships cannot be defined and therefore this study does not have direct implications. However, research on the impact of attending social support groups in relation to resilience and other concepts are scare and posit a relatively new research topic. The older adult population is growing at a rapid rate in Ireland and globally (CSO, 2017; WHO, 2015). This presents the clear need for extra supports and research concerning promoting healthy aging. This need has recently been identified by the HSE who established the Healthy and Positive Ageing Initiative (HaPAI) and published the Healthy and Positive Ageing for All' Research Strategy, in order to help better inform policy responses and encourage research that aims to improve the older adult population of Ireland lives as they age (HSE, 2017).

Conclusion

To summarise and conclude, results from the current study found that after controlling for social support from family and friends, attending social support groups did not significantly predict resilience levels in older adults. Furthermore, there was no significant relationship found between age and resilience. Results from the current study suggest that social support from family and friends is a significant predictor of resilience. With studies also demonstrating the important role of resilience in relation to physical and mental health (Mehta et al., 2008; Nygren et al., 2005; Wells, 2009), one would suggest placing importance on interventions that focus on support from family and friend rather befriending interventions as previously attempted (Hogan, Linden, & Najarian, 2002; Lester, Mead, Graham, Gask,, & Reilly, 2012). This could be done

through educating family members and friends on the possible benefits of supporting their older family members and friends in need. However as noted above, not all older adults have family and friends to provide such needed support which can result in social isolation (Findlay 2003; McHugh, Lee, Aspell, Lawlor & Brennan, 2015) and so social support groups could help counteract this. To the researcher's knowledge, this was the first to investigate the impact of attending social support groups on resilience and so there is a need for future replication among a wider range of older adults within Ireland. Such social support groups are growing in popularity across Ireland for example, Active Retirement Ireland has an estimated 570 groups and the Men's Shed Association reports roughly 100 groups (Active Retirement Ireland, 2019; Carragher, 2003). Further research on the impact of attending such social support groups could prove beneficial with regards to understanding the importance of attending these groups not only on resilience but other concepts such as psychological wellbeing and psychical health.

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Appendix

Appendix A-Participant information sheet

Participant Information sheet

Study title:

The impact of social support groups on resilience in older adults.

Who is conducting this study?

Researcher: Rachel O'Callaghan, final year Psychology student at National College of Ireland.

Supervisor: Dr. Caoimhe Hannigan, Lecturer in Psychology at National College of Ireland.

What is the purpose of this study?

The purpose of this study is to investigate the impact of attending social support groups on resilience levels in older adults.

Why have you been approached to partake?

I am a final year psychology student at National College of Ireland. As a part of my degree I am required to carry out my own research study. I have chosen to investigate resilience levels among older adults for my research project. For the purpose of this research study, I need to recruit adults who are aged 65 and over.

Who can take part in this study?

If you are aged 65 or over and are able to complete a brief written questionnaire, you CAN take part.

Who cannot take part in this study?

If your doctor has told you that you have dementia or Alzheimer's disease, or if you have a serious problem with your memory or thinking that interferes with your day-to-day life, then unfortunately you can NOT take part in this study.

Do you have to take part?

No, participation is completely voluntary. If you are not interested in taking part, you do not have to. If you change your mind about taking part, you are free to withdraw at any point, without giving a reason, prior to handing up your completed questionnaire. Once you have handed in your questionnaire, you can still choose to withdraw your data from the study by notifying the researcher. However, once the data has been analysed and the results have been written up, you will be unable to withdraw your data from the study. All data will be processed anonymously, and the results will not contain your name or any other information that could identify you.

What will happen to you if you take part?

If you do choose to take part, you will be asked to complete the attached questionnaire. The questionnaire will take approximately 20 minutes to complete. You can choose to complete the questionnaire now and return it to the researcher. Alternatively, if you would like to complete the questionnaire in your own time, you are free to do this. You can then return the questionnaire to the designated box in the next 2-3 weeks, at which point I will collect the completed surveys. Your answers will be inputted to a secure computer file, where I will then conduct statistical analyses for the purpose of my final year project.

What are the possible disadvantages of taking part?

The questionnaire being used involves questions that ask you to reflect on ties with family and friends, along with questions concerning how you deal with problems such as overcoming stressful events. You may find these questions difficult to answer. If you do feel upset or concerned about of these questions, I can refer you onto the relevant supports available through the debriefing sheet attached.

What are the possible benefits of taking part?

There are no direct benefits to taking part in this study. However, taking part in this research will allow you to get an idea of what taking part in psychology research involves. This research topic is one I am very passionate about and I hope that by completing this research I will firstly greater my own understanding, but also, add to the literature and evidence of the impact of social support groups on older adults overall quality of life.

Will your identity be kept confidential?

Yes, each questionnaire has a reference code, which will allow for your answers to be kept confidential. All data will be treated in the strictest confidence. Consent forms will be kept in a secure box, which will only be accessible by my supervisor and myself. Your name will not be referred to in any way throughout this research study.

What will happen to the results of this research study?

The results of your questionnaire will be analyzed and written up as a part of my final year undergraduate degree. If you would like a copy of the final write up, you can contact me at x16405046@student.ncirl.ie, and I would be more than happy to share it with you.

Who is organising and funding the research?

This research is being organised by Rachel O' Callaghan, who is a final year psychology student, attending the National College of Ireland. This research study is not being funded.

Who has reviewed this study?

This research study has been reviewed and received approval from the relevant ethics committee at National College of Ireland

Contact for further information

Myself @ Rachel O'Callaghan

x16405046@student.nc**irl.ie** **Or** My supervisor @ caoimhe.hannigan@ncirl.ie

Appendix B -Consent form

Consent form

Participant reference code:

(For research purposes only)

I have read and understand the attached information sheet. By signing below, I declare that I am happy to take part in this research study and give my consent to participate in this study.

I understand that I have the right to withdraw from the study without giving a reason at any point during the study itself.

I also understand that once the process of data analysis has been completed, that I can no longer withdraw my consent.

Signed:

Print name:

Witnessed by:

Print name:

Appendix C –Questionnaire

Section one: About you

Please circle…

Male Female

Age:

Over the last year, considering this group and any other social groups you may take part in, please circle how often you attend such groups…

0	1	2	3	4
Never	Almost Never	Sometimes	Often	Very Often

Over the last month, considering this group and any other social groups you may take part in, please circle how often you attend such groups…

0	1	2	3	4
Never	Almost Never	Sometimes	Often	Very Often

Over the last month, considering this group and any other social groups you may take part in, please state exactly how often you attend such groups…

Over the last year, considering this group and any other social groups you may take part in, please state exactly how often you attend such groups…

Section 2: Your family and friends

FAMILY: Considering the people to whom you are related by birth, marriage, adoption, etc… for example, 1, 2, 3, or 4..

How many relatives do you see or hear from at least once a month?

How many relatives do you feel at ease with that you can talk about private matters?

How many relatives do you feel close to such that you could call on them for help?

FRIENDSHIPS: Considering all of your friends including those who live in your neighborhood… for example, 1, 2, 3, or 4..

How many of your friends do you see or hear from at least once a month?

How many friends do you feel at ease with that you can talk about private matters?

How many friends do you feel close to such that you could call on them for help?

Section 3: Your feelings

Please indicate how you feel about the following statements…

1. If I were to have problems, I have people I could turn to.

Strongly Disagree				Strongly Agree
1	2	3	4	5

2. My family or friends are very supportive of me.

Strongly Disagree				Strongly Agree
1	2	3	4	5

3. In difficult situations, I can manage my emotions.

Strongly Disagree				Strongly Agree
1	2	3	4	5

4. I can put up with my negative emotions.

Strongly Disagree				Strongly Agree
1	2	3	4	5

5. When faced with a problem I can usually find a solution.

Strongly Disagree				Strongly Agree
1	2	3	4	5

6. If I were in trouble, I know of others who would be able to help me.

Strongly Disagree				Strongly Agree
1	2	3	4	5

7. I can generally solve problems that occur

Strongly Disagree				Strongly Agree
1	2	3	4	5

8. I can control my emotions.

Strongly Disagree				Strongly Agree
1	2	3	4	5

9. I can usually find a way of overcoming problems.

Strongly Disagree				Strongly Agree
1	2	3	4	5

10. I could find family or friends who listen to me if I needed them to.

Strongly Disagree				Strongly Agree
1	2	3	4	5

11. If faced with a set-back, I could probably find a way round the problem.

Strongly Disagree				Strongly Agree
1	2	3	4	5

12. I can handle my emotions.

Strongly Disagree				Strongly Agree
1	2	3	4	5

Appendix D- Debriefing page

Dear participant,

At this point I would like to take the opportunity to thank you for taking part in this research study. The aim for this research is to investigate the impact of attending social support groups on resilience levels in older adults. You have completed two questionnaires, the Resilience Appraisal Scale and the Lubben Social Network Scale, along with questions about how often you attend social support groups. Answers from these questionnaires will be statistically analyzed and written up as a part of my final year project.

Research has shown that resilience levels are often associated with having close social networks from family and friends. Little research has been carried out concerning how attending social support groups may affect resilience levels and by carrying out this research, I hope to convey the importance of such groups. If you are interested in finding out what I discover, you can email me at x16405046@student.ncirl.ie and request a copy of the final write up.

If you feel you have been affected in any way by partaking in this research study, I would advise contacting one of the suitable services, using the contact information I have provided below.

Please feel free to take this sheet home.

Samaritans Ireland

Call Freephone: 116 123

Text: 087 260 9090 (standard text rates apply)

ALONE

Telephone**:** 01 679 1032
Email**:** hello@alone.ie

Once again, thank you for taking part in this research study,

Best wishes,

Rachel O'Callaghan

Appendix E – SPSS outputs

Frequencies

Statistics

		Gender	MonthyFrequencyofAttendance	YearlyFrequency
N	Valid	59	59	59
	Missing	0	0	0
Mean		1.53	2.47	2.69
Std. Error of Mean		.066	.181	.185
Median		2.00	3.00	3.00
Mode		2	4	4
Std. Deviation		.504	1.394	1.417
Variance		.254	1.943	2.009
Range		1	4	4
Minimum		1	0	0
Maximum		2	4	4
Sum		90	146	159

Frequency Table

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	male	28	47.5	47.5	47.5
	female	31	52.5	52.5	100.0
	Total	59	100.0	100.0	

MonthyFrequencyofAttendance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	10	16.9	16.9	16.9
	1	2	3.4	3.4	20.3
	2	14	23.7	23.7	44.1
	3	16	27.1	27.1	71.2
	4	17	28.8	28.8	100.0
	Total	59	100.0	100.0	

YearlyFrequency

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	9	15.3	15.3	15.3
	1	2	3.4	3.4	18.6
	2	10	16.9	16.9	35.6
	3	15	25.4	25.4	61.0
	4	23	39.0	39.0	100.0
	Total	59	100.0	100.0	

Explore

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender	59	100.0%	0	0.0%	59	100.0%
MonthyFrequencyofAttendance	59	100.0%	0	0.0%	59	100.0%
YearlyFrequency	59	100.0%	0	0.0%	59	100.0%
LubbenTotalScores	59	100.0%	0	0.0%	59	100.0%
ResilienceTotalScore	59	100.0%	0	0.0%	59	100.0%
age	59	100.0%	0	0.0%	59	100.0%

Descriptives

			Statistic	Std. Error
Gender	Mean		1.53	.066
	95% Confidence Interval for Mean	Lower Bound	1.39	
		Upper Bound	1.66	
	5% Trimmed Mean		1.53	
	Median		2.00	
	Variance		.254	
	Std. Deviation		.504	
	Minimum		1	
	Maximum		2	
	Range		1	
	Interquartile Range		1	
	Skewness		-.105	.311
	Kurtosis		-2.060	.613
MonthyFrequencyofAttendance	Mean		2.47	.181
	95% Confidence Interval for Mean	Lower Bound	2.11	
		Upper Bound	2.84	
	5% Trimmed Mean		2.53	
	Median		3.00	
	Variance		1.943	
	Std. Deviation		1.394	
	Minimum		0	
	Maximum		4	
	Range		4	
	Interquartile Range		2	
	Skewness		-.638	.311
	Kurtosis		-.739	.613

YearlyFrequency	Mean		2.69	.185
	95% Confidence Interval for Mean	Lower Bound	2.33	
		Upper Bound	3.06	
	5% Trimmed Mean		2.77	
	Median		3.00	
	Variance		2.009	
	Std. Deviation		1.417	
	Minimum		0	
	Maximum		4	
	Range		4	
	Interquartile Range		2	
	Skewness		-.863	.311
	Kurtosis		-.506	.613
LubbenTotalScores	Mean		17.20	.776
	95% Confidence Interval for Mean	Lower Bound	15.65	
		Upper Bound	18.76	
	5% Trimmed Mean		17.37	
	Median		18.00	
	Variance		35.544	
	Std. Deviation		5.962	
	Minimum		3	
	Maximum		29	
	Range		26	
	Interquartile Range		9	
	Skewness		-.364	.311
	Kurtosis		-.288	.613

ResilienceTotalScore	Mean		47.8305	.99389
	95% Confidence Interval for Mean	Lower Bound	45.8410	
		Upper Bound	49.8200	
	5% Trimmed Mean		48.1855	
	Median		48.0000	
	Variance		58.281	
	Std. Deviation		7.63421	
	Minimum		23.00	
	Maximum		60.00	
	Range		37.00	
	Interquartile Range		10.00	
	Skewness		-.597	.311
	Kurtosis		.830	.613
age	Mean		74.90	.940
	95% Confidence Interval for Mean	Lower Bound	73.02	
		Upper Bound	76.78	
	5% Trimmed Mean		74.63	
	Median		74.00	
	Variance		52.127	
	Std. Deviation		7.220	
	Minimum		65	
	Maximum		90	
	Range		25	
	Interquartile Range		10	
	Skewness		.486	.311
	Kurtosis		-.726	.613

M-Estimators[a]

	Huber's M-Estimator[b]	Tukey's Biweight[c]	Hampel's M-Estimator[d]	Andrews' Wave[e]
Gender	.	.	.	.
MonthyFrequencyofAttendance	2.72	2.69	2.63	2.69
YearlyFrequency	2.96	3.00	2.88	2.99
LubbenTotalScores	17.52	17.76	17.49	17.76
ResilienceTotalScore	48.1043	48.4133	48.2130	48.4116
age	74.09	74.01	74.22	74.01

a. Some M-Estimators cannot be computed because of the highly centralized distribution around the median.

b. The weighting constant is 1.339.

c. The weighting constant is 4.685.

d. The weighting constants are 1.700, 3.400, and 8.500

e. The weighting constant is 1.340*pi.

Percentiles

		Percentiles						
		5	10	25	50	75	90	95
Weighted Average (Definition 1)	Gender	1.00	1.00	1.00	2.00	2.00	2.00	2.00
	MonthyFrequencyofAttendance	.00	.00	2.00	3.00	4.00	4.00	4.00
	YearlyFrequency	.00	.00	2.00	3.00	4.00	4.00	4.00
	LubbenTotalScores	5.00	10.00	12.00	18.00	21.00	25.00	26.00
	ResilienceTotalScore	33.0000	38.0000	43.0000	48.0000	53.0000	58.0000	60.0000
	age	65.00	66.00	69.00	74.00	79.00	87.00	89.00
Tukey's Hinges	Gender			1.00	2.00	2.00		
	MonthyFrequencyofAttendance			2.00	3.00	4.00		
	YearlyFrequency			2.00	3.00	4.00		
	LubbenTotalScores			13.00	18.00	21.00		
	ResilienceTotalScore			43.5000	48.0000	53.0000		
	age			69.50	74.00	79.00		

Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Gender	.352	59	.000	.636	59	.000
MonthyFrequencyofAttendance	.206	59	.000	.846	59	.000
YearlyFrequency	.229	59	.000	.805	59	.000
LubbenTotalScores	.097	59	.200*	.976	59	.294
ResilienceTotalScore	.084	59	.200*	.964	59	.082
age	.112	59	.062	.940	59	.006

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Reliability

Scale: reliability for lsns

Case Processing Summary

		N	%
Cases	Valid	59	100.0
	Excluded[a]	0	.0
	Total	59	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.829	6

Reliability

Scale: RasReliability

Case Processing Summary

		N	%
Cases	Valid	59	100.0
	Excluded[a]	0	.0
	Total	59	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.886	12

Nonparametric Correlations

Correlations

					ResilienceTotalScore	MonthyFrequencyofAttendance
Spearman's rho	ResilienceTotalScore	Correlation Coefficient			1.000	.219
		Sig. (2-tailed)			.	.096
		N			59	59
		Bootstrap[c]	Bias		.000	-.004
			Std. Error		.000	.122
			BCa 95% Confidence Interval	Lower	.	-.023
				Upper	.	.446
	MonthyFrequencyofAttendance	Correlation Coefficient			.219	1.000
		Sig. (2-tailed)			.096	.
		N			59	59
		Bootstrap[c]	Bias		-.004	.000
			Std. Error		.122	.000
			BCa 95% Confidence Interval	Lower	-.023	.
				Upper	.446	.

c. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Nonparametric Correlations

Correlations

					age	ResilienceTotalScore
Spearman's rho	age	Correlation Coefficient			1.000	.043
		Sig. (2-tailed)			.	.744
		N			59	59
		Bootstrap[c]	Bias		.000	.000
			Std. Error		.000	.143
			BCa 95% Confidence Interval	Lower	.	-.231
				Upper	.	.312
	ResilienceTotalScore	Correlation Coefficient			.043	1.000
		Sig. (2-tailed)			.744	.
		N			59	59
		Bootstrap[c]	Bias		.000	.000
			Std. Error		.143	.000
			BCa 95% Confidence Interval	Lower	-.231	.
				Upper	.312	.

c. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Regression

Descriptive Statistics

	Mean	Std. Deviation	N
ResilienceTotalScore	47.8305	7.63421	59
LubbenTotalScores	17.20	5.962	59
MonthyFrequencyofAttendance	2.47	1.394	59

Correlations

		ResilienceTotalScore	LubbenTotalScores	MonthyFrequencyofAttendance
Pearson Correlation	ResilienceTotalScore	1.000	.344	.243
	LubbenTotalScores	.344	1.000	.225
	MonthyFrequencyofAttendance	.243	.225	1.000
Sig. (1-tailed)	ResilienceTotalScore	.	.004	.032
	LubbenTotalScores	.004	.	.044
	MonthyFrequencyofAttendance	.032	.044	.
N	ResilienceTotalScore	59	59	59
	LubbenTotalScores	59	59	59
	MonthyFrequencyofAttendance	59	59	59

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	LubbenTotal Scores[b]	.	Enter
2	MonthyFrequencyofAttendance[b]	.	Enter

a. Dependent Variable: ResilienceTotalScore

b. All requested variables entered.

Model Summary[c]

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.344[a]	.118	.103	7.23204	.118	7.630	1	57	.008
2	.383[b]	.147	.116	7.17615	.029	1.891	1	56	.175

a. Predictors: (Constant), LubbenTotalScores

b. Predictors: (Constant), LubbenTotalScores, MonthyFrequencyofAttendance

c. Dependent Variable: ResilienceTotalScore

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	399.072	1	399.072	7.630	.008[b]
	Residual	2981.233	57	52.302		
	Total	3380.305	58			
2	Regression	496.465	2	248.233	4.820	.012[c]
	Residual	2883.840	56	51.497		
	Total	3380.305	58			

a. Dependent Variable: ResilienceTotalScore

b. Predictors: (Constant), LubbenTotalScores

c. Predictors: (Constant), LubbenTotalScores, MonthyFrequencyofAttendance

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	40.261	2.897		13.896	.000	34.459	46.063					
	LubbenTotalScores	.440	.159	.344	2.762	.008	.121	.759	.344	.344	.344	1.000	1.000
2	(Constant)	38.763	3.075		12.608	.000	32.604	44.922					
	LubbenTotalScores	.390	.162	.304	2.404	.020	.065	.715	.344	.306	.297	.950	1.053
	MonthyFrequencyofAttendance	.954	.694	.174	1.375	.175	-.436	2.344	.243	.181	.170	.950	1.053

a. Dependent Variable: ResilienceTotalScore

Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics		
						Tolerance	VIF	Minimum Tolerance
1	MonthyFrequencyofAttendance	.174[b]	1.375	.175	.181	.950	1.053	.950

a. Dependent Variable: ResilienceTotalScore

b. Predictors in the Model: (Constant), LubbenTotalScores

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	LubbenTotalScores	MonthyFrequencyofAttendance
1	1	1.946	1.000	.03	.03	
	2	.054	5.988	.97	.97	
2	1	2.787	1.000	.01	.01	.03
	2	.159	4.187	.07	.13	.96
	3	.054	7.197	.92	.86	.01

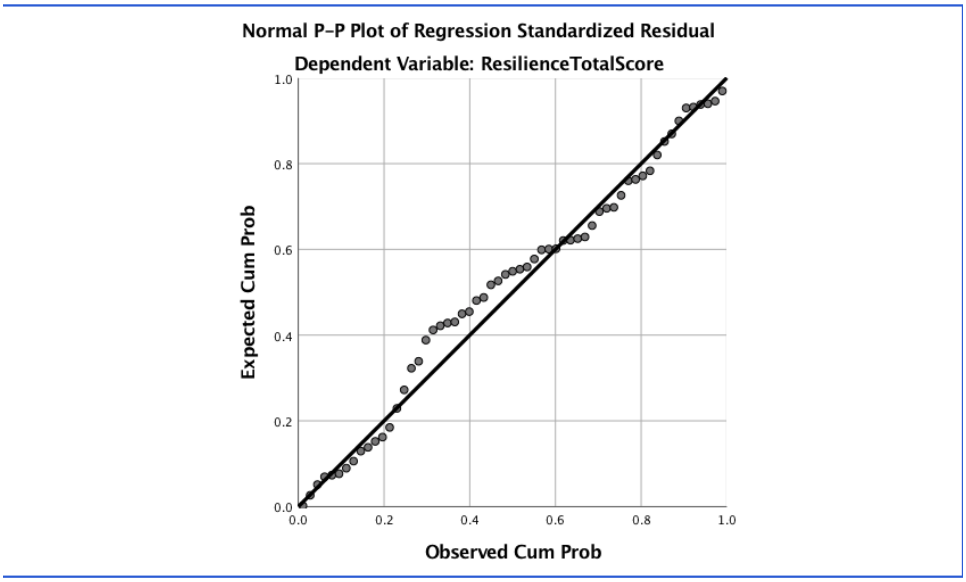
a. Dependent Variable: ResilienceTotalScore

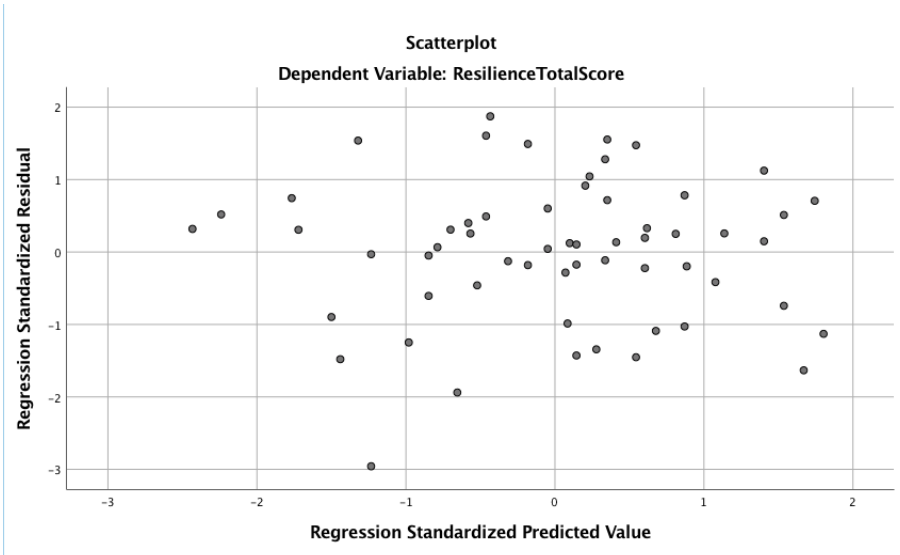
Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	40.7123	53.1050	47.8305	2.92570	59
Std. Predicted Value	-2.433	1.803	.000	1.000	59
Standard Error of Predicted Value	.989	2.587	1.554	.454	59
Adjusted Predicted Value	40.3986	53.7437	47.7852	2.99884	59
Residual	-21.22100	13.43985	.00000	7.05134	59
Std. Residual	-2.957	1.873	.000	.983	59
Stud. Residual	-3.069	1.958	.003	1.010	59
Deleted Residual	-22.85826	14.68766	.04533	7.45706	59
Stud. Deleted Residual	-3.335	2.010	-.002	1.033	59
Mahal. Distance	.118	6.552	1.966	1.727	59
Cook's Distance	.000	.242	.019	.038	59
Centered Leverage Value	.002	.113	.034	.030	59

a. Dependent Variable: ResilienceTotalScore

Charts




Scatterplot
Dependent Variable: ResilienceTotalScore
Regression Standardized Residual
Regression Standardized Predicted Value
2
1
0
−1
−2
−3
−3
−2
−1
0
1
2