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To a Deeper Understanding of Loneliness amongst Older Irish Adults

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ABSTRACT

Loneliness can play a significant role in the wellbeing of older adults. This article describes a qualitative method for using case notes from the clinical records of older individuals in order to investigate the priority concerns spontaneously reported by older adults to deepen our understanding of both the context in which reported loneliness occurs in Ireland and the potential triggers. The participants in this study represent a cross-section of older adults who participated in the Technology Research for Independent Living Clinic (TRIL). Data were collected from participants through interviewer case notes at the TRIL centre in St James's hospital, Dublin. 624 participants (431 females; 193 males) ranging in age from 60–92 years (Mean 73 years, SD 7 years) took part in the study. All were community dwelling and provided consent. A thematic analysis from grounded theory was used to evaluate the case notes for each participant. Preliminary results highlight the richness of phenomenological experience to enhance our understanding of loneliness and provide an opportunity to better understand the precursors and variability that loneliness may take. In this study we found themes in the case note analysis linking social loneliness with self-imposed limitations on social engagement due to declining health while predominate themes for emotionally lonely focused on psychological issues of stress and anxiety associated with adverse life events. The results suggest the importance of case notes to inform clinical practice. Qualitative results provided insights into differing live events of older Irish adults, which help distinguish the causal differences between social and emotional loneliness.

Key words: *loneliness, older adults, ireland, social engagement, case notes*

Introduction

Loneliness is a universal and aversive state which implies, by definition, the negative perception of interpersonal relationships. While loneliness can be a normative experience, loneliness may be an important indicator of well-being[1] associated with physiological and pre-disease pathways[2,3]. This suggests that older people who are socially engaged may be better able to cope with the challenges of old age, and remain healthier both mentally and physically. However as the life course unfolds, physical mobility may become restricted, friends and family become busy or live at a distance, and peers dwindle, many older people risk becoming lonely. A meta-analysis of loneliness reported that between 5–15% of older adults are lonely[4].

While loneliness has been seen as a single state, evidence suggests that loneliness can be divided into two distinct types: social and emotional[5,6]. Although there are not yet clear definitions of either, most recently O Luanaigh and Lawlor hypothesise that social loneliness can be associated with a lack of social integration while emotional loneliness may be the result of psychological factors[7]. Using this Social/Emotional Loneliness framework, we begin by considering emotional loneliness as a condition which is associated with the loss of a close emotional attachment such as a partner or close relative and is associated with quality of the social connection. We see social loneliness, on the other hand, associated with quantity of social contacts and size of social networks. We hypothesize that, while emotional and social loneliness do overlap, attachment tends to predict emotional loneliness whereas social integration predicts social loneliness.

Study Design and Methods

The present study describes an approach for understanding loneliness using a qualitative method. While

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quantitative methods can provide information on duration, frequency and presence of loneliness, narrative data can expand our understanding of the context in which older adults find themselves giving us greater depth to our understanding of the experience.

There were two aims of this research; (1) to test the hypothesis in which loneliness occurs either when an individual lacks a social network (social loneliness) or when a social network does not function well for the individual (emotional loneliness), and (2) describe the value of using a qualitative method to examine case records, which could augment understandings of loneliness.

Context of the research

At the Technology Research for Independent Living (TRIL) Centre, Trinity College Dublin, we are exploring the relationship between life events, loneliness and mental health to understand the complex interplay between them, and to gain insights to the range of coping mechanisms associated with one or more significant life events. Data collection was conducted at the TRIL clinic, which was established within St. James's Hospital, Dublin Ireland.

Sample

The study involved 624 community dwelling participants aged 60+ who were recruited from the Technology Research for Independent Living (TRIL) Clinic between August 2007 and June 2009. Each participant gave written informed consent. The study was approved by St James's Hospital Research Ethics Committee.

Design

Participants were interviewed at the TRIL clinic at St James's Hospital in Dublin. All participants underwent a structured clinical assessment which included medical and falls history, cognitive and psychosocial assessments.

Measures

The present study employed a qualitative approach to demonstrate the potential value of such data to support and deepen quantitative findings[8,9]. Assessing loneliness is usually done by self-report measures. In this study we gathered quantitative measures of loneliness using the de Jong-Gierveld Loneliness Scale self-report measure of loneliness which is a 6 item likert scale. Using the results from the de Jong-Gierveld scale, we identified those in the TRIL cohort who were either socially or emotionally lonely. We found three lonely groups: those who were socially lonely, those who were emotionally lonely and those who were both. A fourth group, comprising individuals who did do not report feelings of loneliness. This last group represented the majority of older Irish adults who participated in the TRIL research clinic.

Procedures

Qualitative data was gathered from case notes taken by the nurse who completed screening assessments with individuals interested in participating in the project. Once accepted a second set of notes was completed by psychologists conducting assessment interviews. This was an opportunistic study, which had not been planned in advance. Case notes had been recorded at part of the in-take and assessment process but there had been no protocol developed for recording notes prior to collecting this data. Case notes have been used to gain additional insights since the 1980s[10–14]. However, it was only at the end of the clinical assessments that we realized that TRIL participant notes might contain a rich source of additional information concerning the priority concerns of the participants at the time of screening, and during the clinical assessment.

Case notes took two forms. During the initial screening, the clinic nurse conducted a telephone interview with each participant documenting general background, recent life events, medical history and other information participants thought important. These were recorded in a telephone contact journal. The second type of case note was recorded during the clinic assessment itself. As researchers conducted the battery of psycho-social assessments, they made notes in the margins of the assessments if a participant volunteered additional information when asked an assessment question. For example, the GALES life event questionnaire allows for only yes or no answers to questions. However, if the participants wanted to expand upon an answer, the added information was entered on the answer sheet. Thus we might find a yes answer to the question about bereavement in the last year along with a notation indicating that there had been two bereavements in the past year for this particular participant.

Once all the case notes were transcribe, each of three researchers was given a complete set of case notes to independently assign a code to every statement using an open coding process. The goal of coding was to identify a set of key words or themes that could be applicable to a range of participant self-reported comments. We used two established coding methods for coding: repetition and pattern matching[15–17]. As Ryan and Bernard explain, »Repetition is one of the easiest ways to identify themes. Some of the most obvious themes in a corpus of data are those »topics that occur and reoccur« or are »recurring regularities«[15]. A second complimentary coding method was based on pattern matching, which is also called similarity and differences by Glaser and Strauss[18]. This method relies on »constant comparison method« involves searching for similarities and differences by making systematic comparisons across units of data«[15]. In addition to the case notes from the clinical records of each of the participants who were socially lonely, emotionally lonely or both, we also sampled the case notes of those who were socially and emotionally satisfied for comparative purposes. When initial coding was complete, the researchers gathered to compare codes and agree upon a common set. Once the research team reached consensus, all the case notes were

recoded using the agreed set of codes. The next step in this process was to search for code patterns across the groups using grounded theory practices, which allows themes to emerge from the data[18]. The data collection and analysis process was designed to ensure consistency amongst the three researchers which used the following procedure:

1. All participants who answered two or more questions in the positive for either socially or emotional loneliness were considered lonely.
2. For each case of an identified lonely participant, a researcher went through the case file and transcribed notes recorded by the nurse during her telephone interview and annotated in the margins by interviewers who had conducted the assessment.
3. Each of three researchers who coded data were given the completed transcripts for every participant and instructed to summarize every notation with a word or short phrase.
4. A group meeting was then held to agree on a common set of words or phrases so as to develop and standardise a common coding guide.
5. The guide was used to standardize the word coding.
6. Codes were then analysed to find patterns across cases.
7. Once a pattern was identified, a theme was assigned to the pattern.
8. Themes were organised into a hierarchy with subthemes.
9. From the themes, explanatory models were developed.

Results

In the following table the final set of codes are listed and grouped into the themes that emerged. On the right hand side of the Table 1, are the three loneliness groups with information on the number of participants who commented on a particular coded topic.

TABLE 1
CODED TOPICS AND THEMES

	Number of Participants Commented on Topic		
	Socially Lonely N=36	Emotionally/ Socially Lonely N=33	Emotionally Lonely N=99
Falling			
History of Falls	20 (56%)	12 (36%)	26 (26%)
Fear of Falling	5 (14%)	2 (6%)	11 (11%)
Recent Accident/Fall	15 (42%)	10 (30%)	29 (29%)
Comment on Dizzy/ Blackouts/Poor Balance	9 (25%)	11 (33%)	15 (15%)
Life Events			
Illness Other/Friend/family	6 (17%)	3 (9%)	22 (22%)
Home Relocation/ Change	1 (3%)	1 (3%)	21 (21%)
Bereavement	3 (8%)	4 (12%)	31 (31%)
Multiple Bereavements in above	1 of 3	1 of 4	10 of 31
Financial Problems	0	1 (3%)	4 (4%)
Victim of a crime/disaster	0	0	7 (7%)
History of Trauma (i.e. childhood illness, abuse, alcoholism, early death of parent, sibling)	1 (3%)	2 (6%)	11 (11%)
Is or Was a Carer	7 (20%)	1 (3%)	15 (15%)
Emotional State			
Report Good Health	13 (36%)	7 (21%)	15 (15%)
Clinically Depressed/ In Counselling	1 (3%)	1 (3%)	8 (8%)
Stress/Anxious/Worried	5 (14%)	6 (17%)	49 (49%)
Sad/Low/Down	1 (3%)	3 (9%)	7 (7%)
Fatalistic/Feeling Helpless	0	1 (3%)	3 (3%)
Feels Rejection	0	1 (3%)	3 (3%)
Has Regrets	0	0	2 (2%)
Misses Someone/Feels Lonely	3 (8%)	4 (12%)	15 (15%)
Interpersonal Concerns			
Lives Alone	8 (22%)	10 (30%)	7 (7%)

TABLE 1
CONTINUED

	Number of Participants Commented on Topic		
	Socially Lonely N=36	Emotionally/ Socially Lonely N=33	Emotionally Lonely N=99
Does Not Drive	0	0	6 (6%)
Family Conflict	1 (3%)	2 (6%)	13 (13%)
Spouse separation or divorce	2 (6%)	0	12 (12%)
Neighbour / Friend Conflict	1 (3%)	0	5 (5%)
Lack of Service Provider Response/Action	0	3 (9%)	8 (8%)
No Support or Separated from Friend / Relative	5 (14%)	4 (12%)	15 (15%)
Health Concerns			
Poor Eye Sight	4 (11%)	3 (9%)	5 (5%)
Poor Hearing	8 (22%)	1 (3%)	5 (5%)
Memory Concerns	5 (14%)	5 (15%)	4 (4%)
Report Poor Health	0	5 (15%)	4 (4%)
Feel Weak or Tired	1 (3%)	13 (39%)	7 (7%)
In Pain	2 (6%)	5 (15%)	10 (10%)
Activity Decline / Limited Mobility	8 (22%)	9 (27%)	15 (15%)
Chronic Illness	16 (44%)	17 (52%)	27 (27%)
Recent Illness	6 (17%)	4 (12%)	15 (15%)
Sleep Problems	1 (3%)	1 (3%)	4 (4%)

Socially and emotionally satisfied – health and well-being

There were 419 older adults ranging in age from 60 to 92 years ($\overline{X}$ 72 years, SD 7 years) who reported being both socially and emotionally satisfied (Table 2). As found in previous research, positive social relationships were independent of residence status. In this satisfied group many lived alone and had been widowed. Nor had this satisfied group escaped bereavement with many of them reporting the death of relative or close friend.

Overall, however this group reported good health with few complaints, which was reflected in the case notes.

Socially lonely

Lonely older Irish adults represented 36 individuals with a range in years of 60–88 years ($\overline{X}$ 73 years, SD 7.7 years) (Table 3). This group was most like the Socially Satisfied in that they had few complains. Of all the three lonely groups, the Socially Lonely were most likely to comment on their good health (36%) although almost half of them also commented on having a chronic illness (44%). However, in contrast to the satisfied group, the Socially Lonely group was distinguished by one major theme: Falls. Case notes indicated that they reported a higher history of falls (56%) or had had a recent fall (42%) about which they commented. While most participants explained that their fall was due to a »trip« or »stumble«, about half of those reporting a fall attributed it to dizziness, poor balance or a blackout. They were also more likely to comment about hearing (22%) loss.

Emotionally lonely

Emotionally Lonely older adults represented 99 older adults with a range in years from 61 to 89 years in this study (Mean 73 years, SD 6.7 years) (Table 4). Of all the three lonely groups, the emotionally lonely were most likely to volunteer that they were stressed (49%). Stress is the major theme of this group Most often the information about stress was found recorded in the margins of the

TABLE 2
SOCIALLY & EMOTIONALLY SATISFIED

N=419	Themes from Case Notes Analysis	Elevated Percentage of Reported Life Events compared to Three Lonely Groups from Quantitative Analysis
	No thematic pattern identified	none
	Mood: satisfied	

TABLE 3
SOCIALLY LONELY

N=36	Themes from Case Notes Analysis	Percentages from Quantitative Data Elevated Percentage Compared to Socially and Emotionally Satisfied
	Major Theme: Falls	42% Live alone
	History of Falls (56%)	30% Do not drive
	Recent accident / Fall (42%)	33% Accident or injury
	Fear of falling (14%)	
	Secondary Theme: Hearing Loss	
	Hearing problems (22%),	
	Mood: Good health (36%)	

TABLE 4
EMOTIONALLY LONELY

N=99	Themes from Case Notes Analysis	Percentages from Quantitative Data Elevated Percentage of Reported Life Events Compared to Socially and Emotionally Satisfied
	Major Theme: Stress	40% Widowed
	Sub-theme: Negative Life Events	10% Became a carer
	Illness of other (22%)	32% Accident or injury
	Home Change (21%)	17% New Major physical illness
	Bereavement (31%)	34% Other major physical
	Victim of a crime or disaster (7%)	11% Problems accessing services
	Sub-theme: Interpersonal Conflict	
	Family conflict (13%)	
	Separation or Divorce (12%)	
	Unresolved past life events (11%)	
	Mood: Stressed, anxious, worried (49 %),	
	Clinical depression noted in 8% of cases reviewed.	

Adverse Life Events Scale (GALES), which asks questions requiring a yes or no answer to questions about recent negative life events such as a death in the family or interpersonal conflict. When asked to respond with a yes or no the emotionally lonely older adult would reported that yes there had been a recent death in the family and this death was causing »a good deal of stress« or »making them feel anxious«. Two stress triggers emerged as sub-themes: Negative Life Events and Interpersonal Conflict.

Loss and conflict contributed to the overall theme for this group: stress. Overall this group reported a multitude of reasons of increased stress in their lives. From the quantitative data analysis we already knew that this group had reported more negative life events including new physical illness (17%) other major physical problems (34%), accidents or injury (32%). More in this group (40%) had become widowed or found themselves caring for a family member (10%). They also reported having more difficulty accessing services (11%) than our satisfied or socially lonely groups. While these higher numbers were not statistically significant, the qualitative information in the margins of the GALES provided additional information about uncounted bereavements: 30% of those bereaved had multiple losses during the year they visited TRIL. Yet, many of these multiple events were only captured in the qualitative notes because of the yes/no answer structure of the GALES. For example, a yes answer on the GALES to family bereavement could not capture what this meant to one woman who reported that both her brothers had died the previous year. It was only through the qualitative analysis of the notes in the margins that we were able to appreciate the impact of multiple negative life events. This group was also more likely to report stress associated with interpersonal conflict. An argument with a sibling, divorce from a spouse, disagreement with neighbors and even dissatisfaction with their physician were all stress generating conflicts reported.

Socially & emotionally lonely

The theme of physical decline characterizes those 33 older adults who reported being both socially and emotionally lonely (Table 5). While some in this group commented on their good health (21%), participants were just as like-

TABLE 5
ALONE: SOCIALLY & EMOTIONALLY

Lonely N=33	Themes from Case Notes Analysis	Percentages from Quantitative Data Elevated Percentage of Reported Life Events Compared to Socially and Emotionally Satisfied
	Theme: Physical Decline	74% Live alone
	Chronic illness (52%)	58% Do not drive
	Comment on poor health (15 %)	37% Death of relative or close friend
	Feeling weak or tired (39%)	27% New Major Physical Illness
	In pain (15%)	40% Other major physical illness
	Experience blackouts, dizziness, poor balance (33%)	43% Accident or injury
	Sub-theme: Limited Social Engagement	27% Difficulty accessing services
	Activity decline (27%)	
	Comment on living alone (30%)	
	Mood: Unclear	

ly to comment on their poor health (15%), typically a chronic illness (52%), that contributed to feeling weak or tired (39%), or in pain (15%). They were most likely to comment on dizziness, blackouts or poor balance (30%) that was limiting mobility or ability to engage in activities (27%).

Discussion: Predictors of Loneliness

Using case notes to capture the priority concerns of older adults, such as that used in this study, may help us gain insights into the qualitative contextual factors associated with reported feelings of loneliness allowing us to understand and differentiate the potential triggers of social and of emotional loneliness.

Falling or fear of falling seems to be the key difference between the socially lonely and socially satisfied. Falling may be linked to declines in their social activity (22%). It suggests that this group may be imposing limitations on social engagement because of their fears of falling. We concluded that social loneliness for this group of older Irish adults is not related to a shrinking social network; rather the loneliness was a result of withdrawal from their networks. For this group improvement in functional capacity and improving social networks may serve to lower loneliness[19]. Interventions which engage older adults in creative and social activities have been found to improve health and wellbeing on a wide range of outcomes including increased alertness, self-worth, social activity, and optimism of life, physical health behaviours and positive health behaviours[20]. The socially lonely are likely to be the group to most benefit from such interventions. Such a programme might target creative life, physical exercise and cultural activities which promote social interaction. Group interventions have been tested and results indicate favourable results[21].

In contrast, the pattern we found for emotionally lonely older adults could be classified as psychological distress. For these older adults, emotional feelings of loneliness are triggered by the accumulation of multiple negative life events or interpersonal conflicts leading to overwhelming feelings of stress and anxiety for which they are not psychologically prepared to cope. It is unlikely that this group would respond positively to improved connections to social networks, and this conclusion has support from other studies, which have critiqued methodologies and effectiveness of social engagement intervention models to alleviate social isolation and loneliness with many older adults[22].

Finally, while those who were both socially and emotionally lonely share falling and chronic illness characteristics found in those who are socially lonely, their health comments and concerns are far more extensive defining the theme for this group; Declining health. We suggest that the causes of loneliness are different and need customized solutions. While the socially lonely may benefit from improved social engagement, interventions for the emotionally lonely group should focus on physiological support. Interventions for the socially and emotionally lonely group are unclear and need further study to understand the trajectory of declining health, potential social isolation and emotional loneliness.

Conclusion

Across life span development, the need to belong is a strong human incentive[23]. People who do not establish and maintain these relationships and a sense of belonging or relatedness to others are likely to experience loneliness, depression, anxiety and anger[23]. Loneliness is also an important predictor of social well-being[25] and is an independent risk factor for depression[25]. Further loneliness has been found to be a significant social factor in autonomic, endocrine and immunological functioning[2]. It is an important factor of old age to address if we are to prevent more serious health difficulties. When designing interventions to tackle loneliness, it has been pointed out that it is important to approach the variability in loneliness depending on late onset or long-established loneliness[25]. It is also

important to address the multi-dimensionality of loneliness. However, the mult-dimensionality of loneliness often not captured in standardized assessments. Qualitative research provides richness and depth but lacks breadth. Case notes are a promising source of data to bridge the gap that may help identify the triggers for social loneliness, and for emotional loneliness so as to provide appropriate interventions.

REFERENCES

1. HOLMEN K, ERICSSON K, ANDERSSON L, WINBLAD B, J Adv Nurs, 17 (1992) 43. — 2. CACIOPPO J, HAWKLEY L, Perspect Biol Med, 46 (2003) S39. — 3. SHANKAR A, MCMUNN A, BANKS J, Health Psychol, 30 (2011) 377. — 4. PINQUART M, SORENSON S, Basic Appl Soc Psych, 23 (2001) 245. — 5. DE JONG-GIERVELD J, J Pers Soc Psychol, 53 (1987) 119. — 6. WEISS R, Loneliness: The experience of social and emotional loneliness (MIT Press Cambridge, Massachusetts, 1973). — 7. O LUANAIGH C, LAWLOR BA, Int J Geriatr Psych, 23 (2008) 1213. — 8. CRESSWELL JW, CLARK,VLP, GUTMANN ML, HANSON WE, Advanced mixed methods research designs. In TASHAKKORI A, TEDDLIE C (Eds.). Handbook of mixed methods in social and behavioural research (Thousand Oaks, CA: Sage, 2003) 209. — 9. CRESWELL JW, FETTERS MD, IVANKOVA NV, Ann Fam Med, 2 (2004) 7. — 10. CICOUREL A, Hearing is not believing: Language and the structure of belief in medical communication. In FISHER S, TODD A (Eds.). The Social Organization of Doctor-Patient Communication, (Washington DC: Centre for Applied Linguistics, 1983). — 11. BARNABY B, DRUMMOND C, MCCLOUD A, BURNS T, OMU N, BMJ, 327 (2003) 783. — 12. CULLEN L, Patient Case Records in Medical and Family History: Examining the Records of the Royal Free Hospital. Family & Community History, 15 (2012) 3. — 13. JONES E, RAHMAN S, EVERITT B, Hist Psychiatr, 23 (2012) 156. — 14. SHAH A, DE T, Int Psychogeriatr, 10 (1998) 163. — 15. RYAN GW, BERNARD HR, Field Method, 15 (2003) 85. — 16. GUBA EG, Monograph, 8 (1978) 53. — 17. BOGDAN R, TAYLOR SJ, Introduction to qualitative research methods (John Wiley, New York, 1975). — 18. GLASER BG, STRAUSS A, Discovery of Grounded Theory. Strategies for Qualitative Research, (Sociology Press, Aldine New York, 1967). –– 19. DYKSTRA PA, TILBURG T, DE JONG-GIERVELD J, Res Aging, 27(2005) 725. — 20. GREAVES CJ, FARBUS L, J R Soc Promo Health, 126 (2006) 134. — 21. PITKALA KH, ROUTASALO P, KAUTIAINEN H, TILVIS RS, J Gerontol, 64A (7) (2009). — 22. CATTAN M, WHITE M, BOND J, LEARMOUTH A, Ageing Soc, 25 (2005) 41. — 23. BAUMEISTER RF, LEARY MR, Psychol Bull, 117 (1995) 497. — 24. ADAMS KB, SANDERS S, AUTH EA, Aging Ment Health, 8 (2004). 475. — 25. VICTOR CR, SCAMBLER S, BOWLING A BOND J, Ageing Soc, 25 (2005) 357.

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PREMA DUBLJEM RAZUMIJEVANJU USAMLJENOSTI MEĐU STARIJIM ODRASLIM IRCIMA

SAŽETAK

Samoća može igrati značajnu ulogu u dobrobiti starijih osoba. Ovaj članak opisuje kvalitativnu metodu korištenja bilješki iz kliničkih zapisa starijih osoba kako bi se istražilo prioritetne brige starijih osoba, koje su spontano prijavlili, te kako bi se produbilo naše razumijevanje i kontekst u kojem se spomenuta usamljenost događa u Irskoj te potencijalnih aktivatora. Sudionici ovog istraživanja predstavljaju presjek starijih osoba koje su sudjelovale u klinici za samostalan život »Technology Research for Independent Living« (TRIL). Podaci su prikupljeni od sudionika iz bilješki ispitivača u TRIL centru u St. James bolnici u Dublinu. U studiji je sudjelovalo 624 sudionika (431 žena i 193 muškaraca) u dobi od 60–92 godina (aritmetička sredina 73 godine, standardna devijacija 7 godina). Svi su bili u zajednici stanovanja i potpisali su informirani pristanak. Tematska analiza koristila se za procjenu bilješki za svakog sudionika. Preliminarni rezultati ističu bogato fenomenološko iskustvo za unaprijeđenje našeg razumijevanja usamljenosti te pružaju priliku za bolje razumjevanje preduvjeta i varijabilnosti koje samoća ima. U istraživanju i analizi zapisa pronašli smo teme koje povezuju socijalnu usamljenost sa samonametnutim ograničenjima društvenog angažmana uslijed opadanj zdravstvenog stanja dok su predominantne teme kod emocionalno usamljenih usmjerene na psihološke probleme stresa i anksioznosti povezanih s nepovoljnim životnim događajima. Rezultati upućuju na važnost zabilješki kao izvora informacija za kliničku praksu. Kvalitativni rezultati daju uvid u različite životne događaje starijih odraslih Iraca, koji pomažu razlikovati uzročne razlike između društvene i emocionalne usamljenosti.