Suicidal Tendencies, Meaning in Life, Family Support, and Social Engagement of the Elderly Residing in the Community and in Institutional Settings

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ABSTRACT

Background: The purpose of this study was to examine the relationship among the elderly between the resilience factors of family support and social engagement (involvement in leisure activities and relationships with friends) and suicidal tendency levels and meaning in life, as a function of residence type (home or institutional setting) and gender.

Methods: One hundred and ninety-seven elderly people participated, half residing in the community and half in institutional settings (nursing homes and assisted living). Five questionnaires (socio-demographic, purpose in life, suicidal tendencies, family support and social engagement) were administered to independently functioning residents who provided informed consent for participation in the study.

Results: The study results show that whereas for all participants there was a negative correlation between family support and depression, and a positive correlation between family support and meaning in life, there was a difference based on residence type. A negative interaction between social engagement and the level of suicidal tendency, and a positive interaction between social engagement and meaning in life was seen only for elderly people residing in institutional settings. Elderly men living in institutional settings presented the most difficult picture based on the study variables.

Conclusions: Family support serves as a resilience factor for all the elderly, but activity and social engagement of elderly men living in institutional settings provides meaning in life and serves as a possible resilience factor against suicidal tendency.

INTRODUCTION

Old age is a period of life that evokes negativity, loneliness, anxiety, and depression (1). There can be loss of independence and autonomy, especially due to health problems, institutionalization, and economic hardships (2, 3). These difficulties affect the functioning of the elderly, and may lead to a sense of lack of meaning in life, depression, suicidal behavior and suicide attempts (4-6). Suicide tendency refers to any intentional harmful act (including acts of omission, such as self starvation) against oneself carried out with awareness of its potentially harmful ramifications (7). The DSM-V (8) defines attempted suicide as a self-initiated sequence of behaviors by an individual who at the time of initiation carries out a set of actions that can lead to his or her own death. Indeed, research shows that the elderly have the highest suicide or suicide attempt rates almost anywhere worldwide (9), with the highest rate among elderly people living in nursing homes (10).

The elderly are not a homogeneous group, but form a spectrum of groups and subgroups. The characteristics of younger and older elderly people differ, as do the characteristics of elderly men and women. The same distinction must also be made when it comes to the

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elderly living in their home and those living outside the community, in institutional settings such as nursing homes (NHs) and assisted living.

Currently, about 2% of the elderly in Israel live in NHs (11). The elderly who leave the community and move to NHs may experience feelings of loss, social isolation (12), anxiety, loneliness, depression (13), and suicidal ideation (14).

Some studies suggest several positive psychological factors that may reduce suicidal tendencies among the elderly, including adaptive and affirming perceptions of reasons for living (RFL) (15), locus of control (16) and religious beliefs (17). However, most studies have indicated family support, social engagement and leisure activities, such as handicrafts, reading, walking, physical activity, dancing, etc. (18, 19) and conversations with other people (18), as factors that may reduce suicidal tendencies in the elderly (14, 20, 21) and increase meaning in life levels (14), both in the elderly living at home and those residing in assisted housing. Yet, no research has examined whether these variables have a differential effect as a function of type of residence (home or institutional setting) and gender. Furthermore, no research has examined the correlation between the social engagement variable (which includes, in addition to contact with friends, also leisure activities) (18), suicidal tendency, and the meaning in life levels. The purpose of the present study is to examine the relationship between resilience factors (family support and social engagement, including engagement in leisure activities and relationships with friends) (18, 22-24 (and the levels of suicidal tendency and meaning in life in the elderly as a function of type of residence (home or institutional setting) and gender.

TYPES OF RESIDENCE AND SUICIDAL TENDENCY

Nursing home residents' (NHRs) suicide is an emergent public health concern (25). NHRs have more suicidal ideation and a higher tendency toward suicidal behavior than community-dwelling residents (CDRs) (14, 26). The risk factors for suicide in NHRs are quite similar to those in CDRs, and they include health deterioration (27), disability, loss of function, loss of control over life, loss of one's spouse, and loneliness (5, 28-30). However, depression, the main risk factor for suicide in the elderly (29), was found to be more prevalent and severe in aging individuals who live in NHs (26, 31). Elderly people in NHs feel that they lost their autonomy and freedom because of inflexible routines, and because they no longer feel part of the larger community outside the NH (32, 33).

Maladjustment to NH life is a main life stressor for the elderly (25). Moving to a NH can cause serious challenges in adapting to living in an institution with new people, and in changing lifestyles and habits, especially if moving to the NH is due to losing a spouse or becoming dependent on help from others (32).

Few studies have compared suicidal tendency in NHRs and CDRs (25). A study by Ron (26), comparing elderly people living at home with those living in NH, found that suicidal tendencies were higher in those living at NH, with elderly women, especially those living at home, suffering more from depression, helplessness, and suicidal tendencies than elderly men and women living in NH, because of loss of their primary role as caregivers for family members. This study, however, did not examine the effect of social engagement and family relationships on the elderly living at home or in institutional settings.

SUICIDAL TENDENCY, SOCIAL SUPPORT, AND SOCIAL ENGAGEMENT

Aside from type of residence, other factors affect suicidal tendency in the elderly, constituting risk or resiliency factors that can increase or reduce their suicidal tendency. These include family support, social attachment, and participation in leisure activities (18, 22-24 (. The strongest meaning in life of NHRs, as they most often reported, are derived from family relationships (34), which is a positive resilience factor that mitigates and prevents suicide of the elderly (14, 35, 36).

Studies indicate that NHRs tend to feel lonely and lack social support because of a diminished social network and isolation from friends and family (37) due to difficulties in maintaining social ties after entering NHs.

Additionally, involvement in leisure activities (handicrafts, reading, walking, physical activities, dancing, conversations with other people, etc.) also affect the level of life satisfaction and the quality of life (QoL), improves wellbeing, reduces depressive symptoms (18, 38-41) and suicidal tendencies (20) in the elderly, especially for NHRs. Leisure activities may improve wellbeing by enhancing social integration and by connecting active individuals with other people (42). They can also generate a sense of autonomy (43). Some studies (44) attest to a negative correlation between leisure activities and suicidal tendency, but there are few studies that address the influence of leisure activities on suicidal tendency in the elderly, and especially NHRs (e.g., 20). The present study seeks to investigate it by adding this variable as a subcategory of social engagement.

TYPE OF RESIDENCE AND MEANING IN LIFE

Meaning in life has been found to be a strong individual predictor of successful aging and satisfaction with life, as well as an important psychological variable that promotes wellbeing (33, 45). Elderly people reported having a stronger subjective feeling that life no longer has meaning than any other age group (e.g., 5), that they have nothing to live for, and that everything that had bestowed value on life has been lost (5). Meaning in life, a concept that originates in Frankl's (46) writings, is the key component that gives strength to cope with suffering and distress, and it is what drives individuals. It helps cope with losses, loneliness, despair, and death anxiety (47), seems to be an important resource for QoL and emotional health (33) and lowers the risk of suicide (15, 48).

The association between meaning in life and QoL was found to be more pronounced for NHRs (49). NHRs show significantly lower scores on meaning in life than CDRs (50) and in some studies even report lack of meaning in life (e.g., 33), which increases the risk for depression and suicide (33, 48). The meaning in life reported by elderly women is higher than that of elderly men, especially in elderly women who reside in institutional settings (33, 51), with the support received from family members and friends helping reduce depression (52). Yet, only a few studies have examined meaning in life of NHRs with most of these studies involving elderly people living in the community.

Reker and Wong (53) listed the sources that provide meaning in life: interpersonal relationships, altruism, religious activity, creative activity, fulfillment of basic needs, socioeconomic security, recreational activities, personal achievement, tradition and culture, hedonistic activities, political and social causes, and connection with nature. Thus, family support, social connections, and recreational activities are a source for finding meaning in life (19, 44).

THE PROPOSED STUDY

Elderly people living in institutional settings show higher suicidal tendencies and lower meaning in life levels than the elderly living in their homes. Nevertheless, the literature suggests that family support, relationships with friends, and participation in leisure activities can reduce elderly people's suicidal tendencies and increase their meaning in life levels. To the best of our knowledge, though, no research has examined the effect of these variables, and in particular the variable unique to this study, social engagement, which includes leisure activities and communicating with friends, as a function of elderly people's type of residence and gender. The present study assumes that these variables differentially affect the elderly, depending on type of residence (home or institutional setting) and gender, and that the ability of social engagement and family support to reduce suicidal tendency or to enhance meaning in life is greater for the elderly living at home. The purpose of this study is to examine the relationship between factors of resilience, family support and social engagement (involvement in leisure activities and relationships with friends), to the levels of suicidal tendency and of meaning in life of the elderly, as a function of the type of residence (home or institutional setting) and gender.

HYPOTHESES

1. Independent elderly people living in the community will show a lower tendency for suicide, higher meaning in life, higher family support, and higher social engagement than those residing in institutional settings.
2. Elderly women will show a lower tendency for suicide, higher meaning in life, higher family support, and higher social engagement than elderly men.
3. Family support and social engagement will be negatively related with suicidal tendency, and positively related with meaning in life.
4. Family support and social engagement will be more strongly related with suicidal tendency and meaning in life for elderly people residing in institutional settings than for those living in the community.

METHOD

PARTICIPANTS

Participants in this study were comprised of 197 elderly Jewish residents of Israel. About a half lived independently in the community ($N = 100$, 50.8%), and the rest resided in institutional settings ($N = 97$, 49.2%) (NHs and assisted living). Most were females ($N = 119$, 63.0%), with no significant difference between the genders in type of residence ($Z = 0.93$, $p = .354$). The age range was 65-100 years, with the elderly living in the community being younger ($M = 72.64$, $SD = 6.47$) than those residing in institutional settings ($M = 81.81$, $SD = 7.37$), ($t(191) = 9.19$, $p < .001$). A greater percentage of the elderly in the community were married (56.0% vs. 19.6%, $Z = 5.26$, $p < .001$), and fewer were widowed (34.0% vs. 60.8%, $Z = 3.77$, $p < .001$). They had 3.5 children on average, with no significant difference by type of residence ($t(185) = 1.88$, $p = .062$). A greater percentage of the elderly in the community had higher and academic education than did those living in institutional settings (57.8% vs. 37.1%).

INSTRUMENTS

Socio-demographic questionnaire. Participants provided information about their gender, age, family status, education level, country of birth, religiosity, number of children, and the type of residence (community/institutional).

Purpose in life test (PIL) (54)**.** The questionnaire assesses the perception of the respondents' world as coherent, understandable, and having meaning. Responses to 18 items were provided on a 6-point Likert scale, ranging from 1 (low purpose in life) to 6 (high purpose in life). The respondents' aggregated score was calculated as the mean of their rankings of the 18 items, with a higher score indicating a higher sense of purpose in life. Internal consistency for the present sample was $\alpha = .93$.

Suicidal tendencies (55). The questionnaire contains 21 items, scored on a scale ranging from 1 to 6, with higher scores indicating higher risk for suicidal behavior. The scale has three dimensions: depression, anxiety, and emotional state. In the current study, internal consistencies were: $\alpha = .85$ for depression, $\alpha = .79$ for anxiety, and $\alpha = .46$ for emotional state. Intercorrelations between the subscales were $r = .46$, $r = .54$, and $r = .70$ ($p < .001$). Because of the low internal consistency for emotional state and high intercorrelations among the subscales, we conducted a principal components factor analysis with the 21 items, using Varimax rotation and eigenvalues greater than one. Two items were initially excluded because of low commonalities (0.25 and 0.16), and the analysis was repeated. Two factors emerged. The first factor, centering around emotional state, contained 11 items (eigenvalue = 6.60, 34.76% of the variance), describes anxiety, guilt, and anger. For example, "I have moments of rage and loss of control" and "I'm falling apart." Internal consistency was good: $\alpha = .89$. The second factor, centering around depression, contained eight items (eigenvalue = 3.35, 17.63% of the variance); for example, "I don't enjoy doing things I used to" and "I feel that things won't improve with time." Internal consistency was good: $\alpha = .89$. Internal consistency for the total score was $\alpha = .90$, and the correlation between the two factors was $r = .31$ ($p < .001$). Both factors and the total score were computed as item means, with higher scores reflecting greater suicidal tendency.

FAMILY SUPPORT

The questionnaire includes three items, concerning telephone conversations with the children, children visits, and telephone conversations with the grandchildren. The items were rated on a scale ranging from 1 to 6, with higher scores representing more frequent family support. In the current study, internal consistency was good: $\alpha = .82$. The overall score for family support was computed from the item's means.

SOCIAL ENGAGEMENT

The questionnaire contains two items, concerning conversations with friends and participation in leisure social activities. The items were rated on a scale ranging from 1 to 6, with higher scores representing greater social engagement. In the current study, the correlation between the two items was $r = .23$ ($p = .002$), and the score for social engagement was computed from their mean values.

PROCEDURE

The Ethics Review Board of Ariel University granted approval for the study. We approached several NHs and assisted living facilities for permission to conduct the study, and seven facilities agreed to participate. The questionnaires were administered only to independently functioning residents who agreed to participate. Questionnaires were administered by research assistants, in cooperation with the management of the facilities. Elderly people living in the community were recruited by means of snowball sampling, with several elderly participants referring additional ones. The questionnaires were administered by research assistants. The purpose of the study was explained to the participants, and they all signed informed consent forms. Participants were guaranteed anonymity and were assured that they could stop participating at any stage, and that the study was conducted for research purposes only.

DATA ANALYSIS

Data were analyzed with SPSS ver. 25. Means, standard deviations, and Pearson correlations were calculated for the study variables. Education differences in the study variables were analyzed with a series of t-tests, and Pearson correlations were calculated between the study variables and age. We used analyses of covariance to assess differences in the study variables, by type of residence and gender, controlling for age and education level. Significant interactions were interpreted with estimated marginal means, and multiple hierarchical regressions were calculated to assess the relationships between family support and social engagement, and suicidal tendency and meaning in life. We entered background variables and type of living in the first step, and family support and social engagement in the second. The interactions between type

of residence, family support, and social engagement were entered in a stepwise manner, in the third step of the regressions, to assess the unique contribution of family support and social engagement to suicidal tendency and meaning in life, by type of residence. All continuous variables were standardized.

RESULTS

DESCRIPTIVE RESULTS

For the entire sample, average suicidal tendency was below and average meaning in life was above the mid-scale. Average family support was above the mid-scale, and average social engagement was at about the mid-scale (Table 1). Significant correlations were found between the study variables. Total suicidal tendency and all its dimensions correlated negatively with meaning in life and social engagement. Depression correlated negatively with family support. Meaning in life correlated positively with both social engagement and family support.

Age correlated positively with suicidal tendency (total score, $r = .40$, depression, $r = .34$, emotional state, $r = .31$, $p < .001$), and negatively with meaning in life ($r = -.41$, $p < .001$) and social engagement ($r = -.17$, $p = .020$). This means that advanced age increased suicidal tendency, and decreased meaning in life and social engagement.

Academic education was a significant factor in suicidal tendency, with academically educated elderly people scoring lower than those with a high school education ($M = 2.36$, $SD = 0.69$ vs. $M = 2.87$ $SD = 0.80$, $t(170) = 4.44$, $p < .001$). The elderly with academic education also scored higher on meaning in life ($M = 4.64$, $SD = 0.76$ vs. $M = 3.86$ $SD = 1.05$, $t(163.49) = -5.60$, $p < .001$) and on social engagement ($M = 4.25$, $SD = 1.24$ vs. $M = 3.46$ $SD = 1.57$, $t(164.92) = -3.65$, $p < .001$) than those with a high school education. Therefore, age and academic education were controlled for while examining the research hypotheses.

Table 1. *Means, standard deviations, and correlations between the study variables (N = 197)*

	M (SD)	2.	3.	4.	5.	6.
1. Suicidal tendency: total score	2.67 (0.78)	.76***	.85***	-.76***	-.12	-.32***
2. Suicidal tendency: depression	2.88 (1.02)		.31***	-.55***	-.20**	-.19**
3. Suicidal tendency: emotional state	2.53 (0.93)			-.67***	-.01	-.32***
4. Meaning in life	4.21 (0.97)				.24***	.43***
5. Family support	4.36 (1.08)					.24***
6. Social engagement	3.78 (1.47)					

**$p < .01$, ***$p < .001$
range: 1-6.

SUICIDAL TENDENCY, MEANING IN LIFE, FAMILY SUPPORT, AND SOCIAL ENGAGEMENT

The first two hypotheses were examined using two-way analyses of covariance, to assess differences in suicidal tendency, meaning in life, family support, and social engagement by type of residence and gender, controlling for age and level of education (Table 2).

Suicidal tendency, both the total score and its dimensions, was significantly higher for elderly people residing in institutional settings than for those living at home. All three interactions were found significant. *Post hoc* analyses revealed that the total score for suicidal tendency was highest for men residing in institutional settings, higher than for women in institutional settings $p = .012$, men in the community $p = .001$, and women in the community $p = .013$. Depression was higher in men in institutional settings than those in the community ($p = .011$), whereas depression in women was in between them and not different from them. Mean scores for emotional state was highest for men living in institutional settings, higher than for all other groups (women in institutional settings, $p = .005$, men in the community, $p = .002$, women in the community $p = .007$). Meaning in life was found to be higher for elderly people in the community than for those living in institutional settings, and higher for women than for men, implying that meaning in life was lowest for men living in institutional settings ($p < .001$). Both family support and social engagement differed by type of residence, with elderly people in the community reporting higher family support and higher social engagement than those living in institutional settings. Social engagement was higher for women than for men.

The relationships between family support and social engagement, and suicidal tendency and meaning in life (hypothesis 3), were examined with multiple hierarchical regressions. Background variables and type of residence were initially entered and family support and social engagement next. All four models were significant, with 17% to 42% of explained variance (Table 3). Beyond type of residence and background variables, the total score of suicidal tendency and emotional state correlated negatively with social engagement, with higher social engagement

Table 2. *Means, standard deviations, and F values for the study variables by type of residence and gender (N = 189)*

	Community M (SD)		Institutional M (SD)		Difference F (1, 179) (η^2)		
	Men (n = 39)	Women (n = 58)	Men (n = 31)	Women (n = 61)	Type of residence	Gender	Type of residence × gender
Suicidal tendency: total score	2.26 (0.66)	2.43 (0.69)	3.31 (0.74)	2.76 (0.75)	9.15** (.055)	1.97 (.012)	9.59** (.058)
Suicidal tendency: depression	2.30 (0.86)	2.63 (0.91)	3.34 (1.11)	2.99 (0.98)	4.23* (.027)	0.01 (.001)	4.09* (.026)
Suicidal tendency: emotional state	2.18 (0.62)	2.30 (0.68)	3.29 (1.19)	2.60 (0.86)	8.17** (.050)	3.60 (.023)	8.85** (.054)
Meaning in life	4.76 (0.63)	4.62 (0.73)	3.11 (0.96)	4.08 (0.90)	24.98*** (.138)	9.18** (.056)	18.64*** (.107)
Family support	4.49 (1.03)	4.62 (0.97)	4.00 (1.04)	4.25 (1.14)	4.09* (.027)	1.20 (.008)	0.10 (.001)
Social engagement	3.87 (1.23)	4.33 (1.24)	2.86 (1.41)	3.83 (1.59)	5.03* (.031)	9.15** (.056)	1.14 (.007)

*$p < .05$, **$p < .01$, ***$p < .001$

having lower suicidal tendencies. Depression correlated negatively with family support, with those having higher family support reporting lower depression levels. Meaning in life correlated positively with both family support and social engagement, with higher family support and social engagement, correlating with higher meaning in life.

To evaluate the unique contribution of family support and social engagement to suicidal tendency and meaning in life, by type of residence (hypothesis 4), the two interactions of type of residence with family support and social engagement were defined. All continuous variables were standardized, and the interactions were entered stepwise in the third step of each of the regression models described above. In three of the four models, the interaction between type of residence and social engagement was found to be significant.

Table 3. *Multiple regression coefficients (β) for suicidal tendency and meaning in life, by family support and social engagement (N = 189)*

	Suicidal tendency			Meaning in life
	Total score	Depression	Emotional state	
Step 1				
Type of residence	-.19*	-.14	-.18*	.27***
Gender	.07	.03	.08	-.13
Age	.25**	.27**	.16	-.23**
Education	-.25***	-.14	-.30***	.30***
Adj.R^2	.234***	.150***	.196***	.339***
Step 2				
Type of residence	-.17	-.11	-.16	.21**
Gender	.04	.02	.05	-.07
Age	.23**	.26**	.15	-.21**
Education	-.21**	-.16*	-.25**	.27***
Family support	-.02	-.17*	.06	.17*
Social engagement	-.17*	.01	-.19*	.23***
Adj.R^2	.252***	.168***	.214**	.423***
F(6, 182)	9.35***	6.06***	7.84***	19.58***

*$p < .05$, **$p < .01$, ***$p < .001$.

Note: Type of residence: 1=community, 0=institutional setting. Gender: 1=male, 0=female. Education: 1=higher and academic education, 0=high school education.

Suicidal tendency: total score. The interaction of type of residence with social engagement was significant (β = .40, $p < .001$), adding 9.0% to the explained variance in the total score of suicidal tendency ($p < .001$). Its interpretation with simple slopes (56, 57) revealed a negative relationship between social engagement and suicidal tendency for elderly people residing in institutional settings (coefficient = -0.35, $t = -4.64$, $p < .001$) and a non-significant relationship for those in the community (coefficient = 0.16, $t = 1.85$, $p = .067$) (Figure 1).

Suicidal tendency: emotional state. The interaction of type of residence with social engagement was significant (β = .45, $p < .001$), adding 11.4% to the explained variance in emotional state ($p < .001$). Its interpretation with simple slopes revealed a negative relationship between social engagement and emotional state for elderly people residing in institutional settings (coefficient = -0.46, $t = -5.29$, $p < .001$) and a non-significant relationship for those in the community (coefficient = 0.21, $t = 1.95$, $p = .052$) (Figure 2).

Meaning in life. The interaction of type of residence with social engagement was significant (β = -.23, $p = .005$) and added 2.70% to the explained variance in the total score of suicidal tendency ($p = .005$). Its interpretation with simple slopes revealed a positive relationship between social engagement and meaning in life for elderly people residing in institutional settings (coefficient = 0.37, $t = 4.47$, $p < .001$) and a non-significant relationship for those in the community (coefficient = 0.02, $t = 0.20$, $p = .844$) (Figure 3).

In sum, higher social engagement correlated with lower suicidal tendency and higher meaning in life for

Figure 1. *The relationship between social engagement and suicidal tendency, by type of residence*

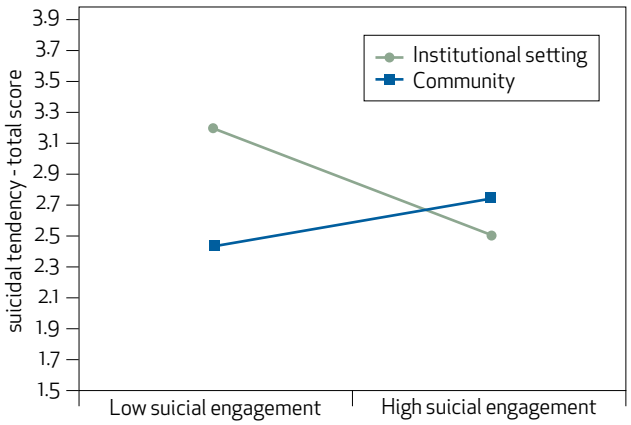
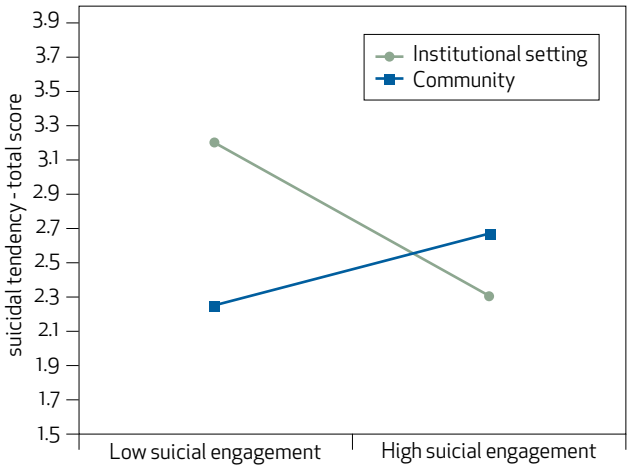


Figure 2. *The relationship between social engagement and emotional state, by type of residence*

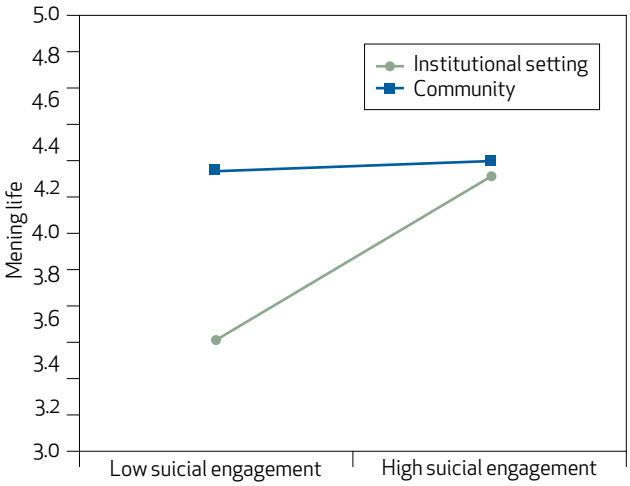


elderly people residing in institutional settings, and was unrelated to suicidal tendency or meaning in life for those living in the community.

DISCUSSION

The study's purpose was to examine the relationship between resilience factors (family support and social engagement, including involvement in leisure activities and relationships with friends), and the level of suicidal tendency and meaning in life in the elderly, as a function of type of residence (home or institutional setting) and gender. Based on the first study hypothesis, we found that suicidal tendency was higher in elderly people residing in institutional settings (NHs and assisted living) than

Figure 3. *The relationship between social engagement and meaning in life, by type of residence*



in those living in the community. Moreover, the level of meaning in life, family support, and social engagement were lower for the elderly residing in institutional settings. In other words, the condition of elderly people who remain in the community is better than that of those who move to institutional settings. These differences, based on type of residence (community or institutional setting), have also been reported in previous studies (e.g., 26), and may be explained by the fact that the elderly who remain in their community generally enjoy support from family, friends and community. In contrast, those who move into institutional settings are detached from their community, friends, and families, who in many cases regard institutions as yet another entity that should assist the family in caring for their elderly relative, and therefore reduce their visits to their relative residing at the institution (58, 59).

The findings regarding gender differences in the study variables were surprising. The literature attributes greater difficulty to women than men in coping with family changes that involve the loss of their caregiving roles for the family and children (60). We therefore expected women's emotional state to be less favorable than that of men. Another study found that elderly women experienced greater depression and hopelessness than did men, and were more prone to suicide, especially women living in the community (26). Yet, the present study found that women experienced more meaning in life than men, and that their social engagement was higher, although no gender differences were found in suicidal tendency and family support. When we added the type of residence

variable to gender, we found that men residing in institutional settings had the highest suicidal tendency, both in its overall score and in its two additional dimensions: emotional state (sense of guilt and anger) and depression. Men who resided in the community notably displayed the lowest level of depression, lower even than that of women. Men residing in institutional settings had the lowest level of meaning in life. No significant differences were found in women, whether they resided in the community or in institutional settings, and on most variables, there was no difference between women and men living in the community. Therefore, regarding men, remaining in the community is the better alternative, whereas type of residence does not affect the mental state of women.

Our findings that contradict those in the literature probably reflect the socio-gender change that has taken place in the 15 years between the previous (26) and the current research. In the past, the women's main mission was to care for the children and the home, and when the children left home, they felt no longer needed. Conversely, most of the women in our study, in parallel to their main role as caregivers for the children and the home, also worked full- or part-time. Therefore, it is reasonable to assume that when the children left home, they retained a purpose and meaning in life, similar to men. In contrast, upon retirement, the men's condition appears to have worsened (61). Men, who perceived most of their mission as breadwinners, had a reduced purpose, which was liable to result in a sense of frustration, depression, and lack of meaning in life. Worse still was the situation of men who, in addition to retirement, moved to an institutional setting (whether by choice or forcibly). They became detached from their familiar and known environment, their place of residence and their friends, in addition to disconnecting from their workplace. We believe that these changes likely explain why elderly men residing in institutional settings, in the present study, reported higher levels of depression, lack of social support, lack of meaning in life, reluctance to participate in leisure activities, and suicidal tendencies than did the other groups. The condition of retired women was better than that of men who moved to institutional settings because they retained the duty of caring for the home, as well as maintaining family ties, at least in the case of the younger women, whether or not they remained in their original homes.

Regarding the third hypothesis, the study found that family support and social engagement (as expressed in relationships with friends and leisure activities) correlated positively with meaning in life. Therefore, the more family support the elderly received and the more engaged they were socially, the higher their level of meaning in life was. These variables probably serve as resilience factors that raise elderly people's meaning in life level. However, when examining the correlation between these variables and suicidal tendency, we found that social engagement seems to be a significant and important factor in increasing elderly people's meaning in life, and, subsequently, reducing their suicidal tendency, whereas family support, which the literature has found to be an important variable as well (21), was associated with reduced depression but not with a reduction in the sense of guilt or in the overall level of suicidal tendency. Family support may help reduce only depression, whereas social engagement may help reduce suicidal tendency levels and improve the emotional state. Regular family member visits give the elderly a sense that they are still loved and cherished by their families, which in turn elevates their spirit. Nevertheless, the elderly are unlikely to share with their family members suicidal thoughts or feelings of anger, guilt, and anxiety, and, therefore, there is no correlation between family support and these dimensions. However, social engagement, which includes social support enabling the elderly to share feelings with peers, as well as leisure activities that distract the elderly from negative thoughts, brings them relief. This explanation, however, needs to be verified in a follow-up study. Therefore, the social engagement variable can serve as a resilience factor for suicidal tendency, whereas the family support variable may serve as a resilience factor for depression.

Another finding concerns the question of whether the research variables differentially affect elderly people's resilience, depending on type of residence (community or institutional setting). Our results show that there is a significant interaction between type of residence and social engagement, with higher social engagement being associated with lower suicidal tendency (in its overall score and in emotional state) and with higher meaning in life, but only for the elderly living in institutional settings. Social engagement may be more significant and important for elderly people living in institutional settings because the change in their lives and the move from home force them to seek social connections and find ways to fill their free time. As we hypothesized, the type of residence creates a significant differential correlation between the resilience variables, meaning in life, and suicidal tendencies.

The correlation between family support, meaning in life, and depression, however, is not a function of the

elderly people's residence. The entire cohort showed a negative correlation between family support and depression, and a positive correlation between family support and meaning in life. Thus, family support does not serve as a resilience factor for the elderly for their emotional state or guilt. A possible explanation for this finding is whether the family maintains contact with the elderly relative to the same extent, or remains equally significant, regardless of where the elderly live. The findings show that the elderly reported high levels of family support (elderly in the community, M=4.5, and those living in institutional settings, M=4.1, out of 6), which may be attributed to the shift in public awareness regarding the condition of elderly people. Thus, family support does not serve as a resilience factor because existing family relations are taken for granted by the elderly. Nevertheless, the fact that family support was not found to be a resilience factor requires further research to examine this issue in depth, perhaps even using qualitative research.

Several considerations limit the scope of our findings. First, because of the limited cooperation of the management of various institutions, it was difficult to reach elderly people living outside the community. Therefore, we were unable to make a distinction between those living in NHs and in assisted living settings. A follow-up study is recommended to differentiate between these two populations. Second, in the present study, we did not examine the length of stay of the elderly in the various residential settings. Duration can affect the level of meaning in life and suicidal tendencies. This should be corrected in future studies. Third, we used a convenience rather than a probabilistic sample. Therefore, the study's findings and conclusions cannot be generalized to the overall elderly population. Moreover, this study is cross-sectional, and therefore directionality cannot be inferred.

However, these limitations do not diminish the importance and contribution of the research findings. The present study has identified differential resilience factors for the elderly, which can be used to reduce their suicidal tendency and increase their meaning in life. The study also focuses on the elderly, especially men, who live in institutional settings, who have higher suicidal tendencies and lower meaning in life levels than women and the elderly living in the community. Finally, the study stresses the importance of social engagement, which serves as a significant resilience factor, especially for the elderly living in institutions settings. Therefore, these institutions should encourage social engagement for the benefit of their elderly residents.

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