

Satisfaction with Life in relation to Desirability of Control and Fear of Death\ Dying among Community Dwelling Older Adults

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Abstract

Background: Death anxiety or fear of death is universal in all societies, especially among older adults, leading to a submissive attitude towards life with no desire to control. However, it could be alleviated by satisfaction with life. **Aim of study:** To investigate the relationship between older adults' fear of death/dying and their desirability of control and satisfaction with life. **Subjects and methods:** This cross-sectional analytic study was conducted in geriatric homes affiliated to the Ministry of Social Solidarity in Beni-Suef city and university hospitals' out-patient clinics on 199 older adults 60-year age or older. **Data** were collected using an interview questionnaire form with the Desirability of Control, Integrity versus Despair, and Collett-Lester Fear of Death scales, in addition to socio-demographic and health characteristics. **Results:** Participants' age ranged from 60 to 85 years, 52.3% males, and 44.2% with no education. 64.3% had high desirability of control, 75.9% had resolution in integrity vs despair scores, indicating satisfaction with life. The mean of average fear of death was 3.20 from a maximum of 5.00. Positive correlations were found between the scores of desirability of control and those of integrity-despair resolution score, and with the scores of fear of dying of others and death of self. The desirability of control score was a main positive predictor of the (life satisfaction score) integrity-despair resolution score. **Conclusion;** Older adults' perceived desirability of control had an influence their fears of death/dying, but this latter is not affected by their satisfaction with life. **Recommendations:** Social activities could improve older adults' life satisfaction and alleviate their fear anxiety. Encouraging older people to be socially active through community health nursing interventions is recommended.

Keywords: Satisfaction with life, Desirability of control, Fear of death/dying, Older adults

Introduction

Death anxiety or fear of death, defined as one's beliefs, sentiments, and attitudes toward this final life event, is universal in all societies. However, it affects individuals differently (*Jong et al., 2019*), and influences their behaviors and decisions (*Zhang et al., 2019*). It is a kind of unavoidable anxiety involving a gamut of death attitudes reflecting one's related fears, with feelings of terror, apprehension, and soreness from death (*Zahedi-Bidgol et al., 2020*). Such thoughts of death may pre-occupy the person's mind and thinking, gliding him/her away from living the moment, and leading to a submissive attitude towards life with no desire to control (*Halil et al., 2021*).

Death anxiety is more common among older adults in comparison with young persons, which is quite understandable. In fact, at this stage of life, people habitually prepare themselves for this inescapable life event in a trial to reach to a sense of veracity rather than anguish and despair (*Hassan ital., 2019; Ghasemi et al., 2020*). This is an essential process in successful aging indicating a resolution of the ultimate psychosocial predicament stated at this stage of Erikson's theory, which considers aging as a part of human development (*Nakamura et al., 2022*). Certain events of life at this stage may initiate this process as retirement, facing a major health problem, or losing spouse, close relatives, or friends (*de Assumpção et al. (2022)*). Thus, the older person starts to look back to his/her life to

reach to a conclusion whether it was well-lived or mismanaged (*Ibrahim, 2022*). If well-lived, the person has a feeling of ego-integrity meaning satisfaction with life and wellbeing (*Chalise, 2019*).

The fear of death or death anxiety can be influenced by several factors in older adults' life. The physical and functional changes of aging associated with ill-health and multiple morbidities are an important factor initiating and perpetrating the feelings of death anxiety (*Solaimanizadeh et al., 2019*). Meanwhile, the individual's personal characteristics as the level of educational attainment, job, and sufficient income could play an alleviating role, while on the contrary financial problems could potentiate the fear of death (*Roldan, ital. 2019; Sebea ital., 2021*). Additionally, religiosity and spirituality shown to influence death anxiety through giving a purpose in life, and providing hope and support (*Soriano and Calong, 2020; Busch, 2022*).

Furthermore, many psychosocial variables can positively or negatively influence feeling of death anxiety in older adults. For instance, leading a social life, having family roles, and close relationships with family and friends were found to be protective against death anxiety (*Rudnicka et al., 2020*). Conversely, feelings of loss of autonomy and control over life and having no role in family and/or society are associated mental distress, hopelessness, despair, low self-esteem due to a sense of worthlessness and low prestige, which would increase the fear of death (*Sreelekha and Sia, 2022*). Death anxiety has also been demonstrated to be less with high emotional intelligence and active coping (*Meléndez et al., 2022*).

Overall, death anxiety was shown to be alleviated by satisfaction with life (*Jose ital., 2018; Tel ital., 2020*). Hence, for an effective successful aging, people should focus on the matters that enhance their satisfaction with life and at the same time should keep their sense of control and autonomy (13). Therefore, life satisfaction may be considered as an essential factor influencing successful aging and consequently alleviating death anxiety (*Estebansari ital., 2020; Hye-Kyung and Ji-Hye, 2020*).

The awareness of geriatric psychology is crucial for community, gerontological, and geriatric nurses while the provision of proper elderly care & services planning (*Nakamura et al., 2022*). Which entail plans to improve older adults' physical and mental wellbeing and enhance their satisfaction with life (*Hassan et al., 2019; Elzohairy et al., 2022*). Consciousness with these developmental needs are of important in geriatric services which should be incorporated in geriatric nursing home care as well as in primary health care programs in community healthcare setting and all sets which providing elderly services (*de Assumpção et al., 2022; Nakamura ital., 2022*).

Significance:

Although the issue of death anxiety and fear of death is of major concern particularly among older adults, there is a paucity of local research measuring the extent of problem and investigating its possible influencing factors. The present study is an attempt to fill a knowledge gap regarding the fear of death among older adults and its relation to their desire to control and life satisfaction or ego-integrity. This would help in the development of community nursing interventions to foster their satisfaction with life, well-being and relieve their fears\ death anxiety; which had an impact on their active ageing quality of life and well-being.

Aim of study:

To investigate the relationship between older adults' fear of death/dying & their desirability of control and satisfaction with life.

Research Questions:

1. What is the level of desirability of Control among older adults?
2. What is the level of death anxiety among older adults
3. What is the level of life satisfaction (ego-n integrity) among older adults
4. Is there a positive relationship between life satisfaction (ego-n integrity), desirability of Control and death anxiety & fear of death

Subjects and Methods

Design: A cross-sectional analytic design was utilized, where all variables were measured at the same point in time.

Setting: The study was conducted in geriatric homes affiliated to the Ministry of Social Solidarity in Beni-Suef city. These included Dar-Ahalina and Dar-Elkhare in East Nile city in Beni-Suef, and out patients' clinics in beni-suef university hospitals which provide services for elderly.

Participants: The study population consisted of all older age adults in these aforementioned settings. The inclusion criteria for recruitment in the study sample were being 60 years or older, and able to communicate effectively. Those having diagnosed psychiatric or neoplastic diseases were excluded. Sample size was calculated using the G*Power software program for a multiple linear regression analysis with 20 predictors, and an expected r-square value 0.15 or higher corresponding to low effect size (0.18). At 95% level of confidence, and 90% power, the required sample size turned to be 162 participants. This was increased to 200 to compensate for an expected non-response rate of approximately 20%. A convenience consecutive sampling technique was used in recruiting participants according to the set eligibility criteria.

Tool Used: An interview questionnaire sheet used to collect data. It consisted of a section for respondent's personal data, in addition to three scales. The socio-demographic characteristics sought were age, sex, level of education, marital and occupation status, monthly revenue, residence, and living arrangement. It also solicited data about the medical history such as medication intake and disabilities, as well as the social history as having communication with friends and relatives.

The first scale was the Desirability of Control questionnaire. It was developed by **Burger and Cooper (1979)** to assess respondents' attitudes toward the perceived need for control. The scale has documented high reliability with Cronbach's alpha coefficient 0.80, and discriminant validity. It

has 20 statements reflecting different possible life situations that need control. Some of these statements are positive indicating high desirability of control such as "*I would favor to be a leader rather than a follower,*" and others are negative indicating low desirability of control as "*Others usually know what is best for me.*" The responses are on a seven-point Likert type Scale ranging from "*This statement does not apply to me at all*" to "*This statement always applies to me.*" These responses are respectively scored from one to seven, with reverse scoring for the negative statements. The scores of the 20 items are summed-up so that a higher score indicates more desirability of control. The total possible scores range from 20 to 140. For categorical presentation, the scores were considered high based on the norms reported by **Burger and Cooper (1979)**. The reliability measured in the present study was also high with Cronbach's alpha coefficient 0.79.

Second scale was the Integrity versus Despair Questionnaire, a part of the 112-items, which Measures the Psychosocial Development, it developed by **Hawley (1988)** who assessing personality development based on Erikson's eight stage theory. The fourteen items of ego-integrity versus despair corresponding to Erikson's eighth stage of reflection of old age were used in the current study. These consist of seven positive items and seven negative ones on a 5-point Likert type scale ranging from "*Not at all like you*" to "*Very much like you.*" The positive and negative scores reflect respondent's reactions to various personality dimensions, and the difference between them indicates the extent of conflict resolution. Thus, a more positive difference indicates high resolution and more satisfaction with own life. For categorical presentation, the scores of differences exceeding zero were considered positive resolution indicating life satisfaction. The scale has a good reliability as measured through internal consistency, with a total scale Cronbach's alpha coefficient from 0.65 to 0.84 for the negative and positive parts. It also has a documented content validity (**Bergee and Grashel, 1995**). In the present study, the coefficient alpha ranged between 0.53 and 0.76 respectively.

The third scale was Arabic version of the revised by Collett-Lester Fear of Death Scale (*Abdel-Khalek & Lester, 2004*) originally developed by *Collett and Lester (1969)*. It consists of 32 statements categorized into four dimensions assessing the fear of death of self and of others, as well as the fear of dying of self or of others. The answer to each item is on a 5-point Likert type scale ranging from “*Not at all anxious/disturbed*” to “*Very much anxious/ disturbed*.” These are scored from one to five respectively. The scores of each dimension are summed and divided by the number of items giving a mean score ranging from one to five. An average score of the four dimensions’ means was also calculated as stated by *Venegas et al. (2011)*. The tool has documented validity and reliability (*Adrian and Grafton, 1996; Niemeyer, 1997*). The reliability assessed in the existing study was high with Alpha Cronbach constant 0.86.

The first two scales were translated into Arabic using the translation-back-translation technique as recommended (*Behling and Law, 2000*). The data collection interview form was finalized after pilot study testing on a sample of older adults constituting 10% of the calculated sample. These were not included in the main study sample to avoid any bias.

Validity of Tools:

The validity of the tools was evaluated by five qualified experts (three experts from the community health nursing and mental and psychiatric Health Nursing specialty and two geriatric nursing). The tools were reviewed for content accuracy and internal consistency. as, they were asked to judge the points for completeness and clarity (content validity).

Reliability of Tools:

The reliability of the tools was verified statistically for measuring the internal consistency of the instrument, using Cranach’s Alpha test demonstrated good reliability as Control scale (0.79), Integrity scale (0.55), and Fear of death (0.50).

Fieldwork: Upon securing all required official permissions to conduct the study, the researchers visited the study settings to meet with the director of each institution and arrange for the data collection procedures. Then, they

met individually with each older person to explain aim and data collection procedures. Eligible ones were invited to participate after being briefed about their rights and signing an informed consent form.

Elderly who provided their consent were interviewed by the researchers using the interviewing questionnaire sheet. This was done individually with full precautions of privacy. The interviewees were reassured that there are no correct or false answers and that they should provide true answers reflecting their actual feelings and thoughts. Each interview took 30-45 minutes according to interviewee’s ability to respond. The data collection process started from beginning of March 2023 to end of May 2023. The fieldwork was done three days/week from 9.00 am to 1.00 pm according to the planned schedule.

Statistical analysis: the Quantitative data were presented in terms of means and standard deviations, and medians. The relationships between quantitative scores and numeric and ranked variables were assessed using Spearman rank correlations. Multiple linear regression analyses were used to identify the factors independently influencing the scores of desirability of control, ego-integrity, and fear of death. All analyses were carried out using IBM SPSS Statistics for Windows, version 20, IBM Corp., Armonk, NY (USA).

Administrative & ethical issues: All necessary permissions were secured through official channels to conduct the study. The research proposal was approved by the research ethics committee, Faculties of Medicine Beni-Suef University. Each participant signed an informed consent after being briefed about the study aim and its` maneuvers, and the rights to refuse participation or withdraw any time. Total confidentiality of the collected data were ensured. They were informed that the complete results of the study would be made available to them upon request.

Results

The study included 199 older persons (one did not complete the study) in age range from 60 to 85 years old, with slightly more males were (52.3%), and 79.4% married (Table 1).

The highest percentage had no education (44.2%), whereas only 17.6% had university level education. More than one-third had no previous job (38.7%) and were residing in urban areas (35.2%). The majority had households with <2 crowding index (82.9%) and reported having sufficient income (73.4%).

As presented in Table 2, almost all older persons were on regular medication (96.0%), and 26.9% reported related side effects. Only 8.0% were having disabilities. As for the social health, very few of them were practicing religious (15.6%) and/or NGO (6.5%) activities. However, around two-thirds or more of them reported having a close friend, met with and called friends, and called relatives. The highest percentage (64.8%) considered their overall health fair, while only 3.5% viewed it as poor.

Table 3 demonstrated a very wide range of older persons' scores of desirability of control, from 28 to 136 on a scale ranging from 20 to 140, with median 90.00. According to the tool norms, 64.3% were considered to have high desirability of control. As for the integrity vs despair scores, the mean of positive items (22.65) exceeded the mean of negative items (19.10). Thus, the difference between them was positive indicating more resolution, reflecting more satisfaction with life. Moreover, the results showed that 151 (75.9%) of the older persons were having a positive score exceeding their negative score, indicating their satisfaction with their life. The table also indicates wide ranges of fear of death, with average mean 3.20, exceeding the neutral point of the scale. It is also noticed that the mean score of the fear of death of others was the highest (3.45) while the fear of dying of others was the lowest (3.06).

Table 4 showed significant positive correlations between the scores of desirability

of control and those of integrity-despair resolution score as well as with the scores of fear of dying of others and death of self. Meanwhile, the integrity-despair resolution score had no significant correlations with any of the fear of death scores. Also the table pointed to significant weak positive correlations among the four dimensions of fear of death. As for the correlations with participants' characteristics, the table indicates that level of education & income had a significant positive correlations with desirability of control scores & of integrity-despair resolution. Meanwhile, the score of fear of dying of self correlated positively with income and crowding index, whereas the score of dying of others correlated positively with overall perception of health. Lastly, the fear of death of others correlated positively with the level of education.

In the multivariate regression analyses (Table 5) showed that; calling relatives, having a close friend, and residing in urban areas were positive predictors of the desirability of control score, while female gender with overall excellent health were demonstrated a negative predictors. These factors explained 26% of the variance of this score. As for the integrity-despair resolution score, its main positive predictor was the desirability of control score, followed by the level of education and meeting with friends. They explained 19% of the variance of this score. Lastly, the table indicated that the positive predictors of the average score of fear of death and dying were the score of desirability of control, having a close friend, having a disability, and being female. On the other hand, having an NGO activity and a higher crowding index were negative predictors. These factors explained 28% of the variance of the death/dying score.

Table (1): Demographic Characteristics of elderly in the study sample (N=199)

	Frequency	%
Age:		
<70	177	88.9
70+	22	11.1
Range	60-85	
Mean±SD	60.0±8.7	
Median	60.0	
Gender:		
Male	104	52.3
Female	95	47.7
Marital status:		
Unmarried	41	20.6
Married	158	79.4
Education:		
None	88	44.2
Basic/secondary	76	38.2
University	35	17.6
Previous job:		
Employee	46	23.1
Worker	76	38.2
None	77	38.7
Residence:		
Rural	129	64.8
Urban	70	35.2
Crowding index:		
<2	165	82.9
2+	34	17.1
Income:		
Insufficient	53	26.6
Sufficient/saving	146	73.4

Table (2): Medical & Social History of Elderly in the study sample (N=199)

	Frequency	%
Physical health:		
On regular medication	191	97.0
Have side effects	53	26.9
Have disability	16	8.0
Social health:		
Practice religious activities	31	15.6
Have NGO activities	13	6.5
Have a close friend	128	64.3
Meet with friends	150	75.4
Call friends often	88	44.2
Call relatives often	129	64.8
Overall health:		
Excellent	63	31.7
Fair	129	64.8
Poor	7	3.5

Table (3): Desirability of control, Ego-integrity (Life satisfaction), and fear of death among elderly in the study sample (N=199)

Scales	Scores				
	Mean	SD	Median	Min	Max
Desirability of control (max=140)	89.55	16.90	90.00	28.00	136.00
No. having high desirability of control: 128 (64.3%)					
Integrity vs despair:					
Positive (max=35)	22.65	4.00	23.00	11.00	35.00
Negative (max=35)	19.10	4.37	18.00	10.00	31.00
Difference (resolution)	3.55	5.88	4.00	-12.00	18.00
No. of satisfied with life (+ve difference): 151 (75.9%)					
Fear of death (max=5):					
Death of others	3.45	0.56	3.38	2.25	5.00
Death of self	3.14	0.49	3.13	1.75	4.38
Dying of others	3.06	0.55	3.13	1.63	4.50
Dying of self	3.17	0.56	3.13	2.00	5.00
Average (overall)	3.20	0.35	3.19	2.28	4.28

Table (4): Correlation Matrix of elderly's scores of desirability of control, integrity-despair resolution, and fear of dying

	Spearman's rank correlation coefficient					
	Desirability to control	Integrity-despair resolution	Fear of:			
			Dying Self	Dying Others	Death of self	Death of Others
Desirability of control	1.000					
Integrity-despair resolution	0.372**	1.000				
Fear of:						
Dying of self	0.077	0.112	1.000			
Dying of others	0.167*	0.012	0.203**	1.000		
Death of self	0.264**	0.033	0.176*	0.343**	1.000	
Death of others	0.107	0.049	0.047	0.221**	0.257**	1.000
Characteristics:						
Age	.051	.031	0.034	-0.004	-0.002	-0.062
Education	.209**	.249**	-0.076	0.073	0.098	0.216**
Crowding index	-.049	-.082	-0.169*	-0.090	0.106	-0.053
Income	.180*	.190**	0.179*	0.028	-0.008	0.088
Overall health	.019	.060	0.055	0.160*	0.060	0.107

(*) Statistically significant at $p < 0.05$ (**) Statistically significant at $p < 0.01$

Table (5): Multiple linear regression model for the desirability of control, integrity-despair resolution, and average fear of death/dying scores

	Unstandardized Coefficients		Standardized Coefficients	t-test	p-value	95% Confidence Interval for B	
	B	Std. Error				Lower	Upper
Desirability of control score							
Constant	84.66	5.29		16.005	<0.001	74.23	95.09
Call relatives	11.27	2.47	0.32	4.565	<0.001	6.40	16.14
Have close friend	8.45	2.40	0.24	3.515	0.001	3.71	13.19
Female gender	-5.83	2.14	-0.17	-2.729	0.007	-10.05	-1.62
Urban residence	5.85	2.26	0.17	2.590	0.010	1.39	10.30
Overall excellent health	-4.15	2.08	-0.13	-1.995	0.047	-8.26	-0.05
r-square=0.26 Model ANOVA: F=13.69, p<0.001 Variables entered and excluded: age, education, previous job, income, marital status, crowding index, disability, friends, religious and NGO activities							
Integrity-despair resolution (life satisfaction) score							
Constant	-9.62	2.09		-4.613	<0.001	-13.74	-5.51
Desirability of control score	0.10	0.02	0.30	4.424	<0.001	0.06	0.15
Education	0.80	0.27	0.19	2.938	0.004	0.26	1.34
Meet with friends	1.86	0.91	0.14	2.058	0.041	0.08	3.65
r-square=0.19 Model ANOVA: F=15.66, p<0.001 Variables entered and excluded: age, gender, previous job, income, marital status, residence, crowding index, disability, religious and NGO activities							
Average fear of death/dying score							
Constant	2.68	0.25		10.848	<0.001	2.19	3.17
Desirability of control score	0.01	0.00	0.25	2.556	0.012	0.00	0.01
Have close friend	0.19	0.08	0.25	2.461	0.016	0.04	0.34
Have disability	0.59	0.25	0.22	2.344	0.021	0.09	1.10
Have NGO activity	-0.33	0.15	-0.22	-2.176	0.032	-0.64	-0.03
Crowding index	-0.22	0.11	-0.19	-1.993	0.049	-0.44	-69.05
Female gender	0.13	0.07	0.17	1.762	0.081	-0.02	0.27
r-square=0.28 Model ANOVA: F=4.88, p<0.001 Variables entered and excluded: age, education, previous job, income, marital status, residence, integrity-despair resolution score							

Discussion

Our study was aimed at investigating the relationship between older persons' fear of death/dying and their desirability of control and satisfaction with life or ego-integrity. The results indicate a significant positive influence of the perceived desirability of control on their fears of death/dying. Nonetheless, no significant association could be identified with their satisfaction with life as reflected by their scores of resolution of integrity-despair.

According to the current study findings, participant older adults have relatively high scores of desirability of control, as indicated by their high mean and median scores. Actually, the median of 90 indicates that at least one half of them have a score exceeding the midpoint of the scale (70). Thus, almost two-thirds of them are having high desirability of control. This reflects a substantial percentage of the older persons sample are highly motivated to have good control on their life events. They defy to

be passive or submissive in their life, which would improve their sense of wellbeing. In line with this, a study in the United States found that high desirability of control was associated with active coping and better psychological wellbeing (*Fritz and Gallagher, 2020*).

Concerning the factors influencing older adults' desirability of control score, the present study identified certain of their characteristics. Thus, having active social life as calling relatives and having a close friend seem to increase the feeling of desirability to control, which could be explained by their motivating effects. Also, those older persons residing in urban areas seem to have more desirability of control, which could be due to the differences in environmental factors between rural and urban communities. In line with this, a study on elderly persons in Indonesia highlighted the importance of support from family and relatives in improving their psychological health and providing meaning to their lives (*Bahtiar et al., 2020*).

Conversely, female gender turned to be a factor negatively predicting the score of desirability of control. The finding is quite plausible in a community that is still male-controlled where women are still less empowered and seldom have control on their lives. In congruence with this, a study in Zimbabwe highlighted that the patriarchal society may impose certain gender-based rules on women depriving them from being in control of their own decisions (*Skovdal et al., 2022*). Similar views were also reported by Pakistani men in a study of masculinity beliefs in the United Kingdom and Pakistan (*O de Visser et al., 2022*).

Lastly, the current study results demonstrate that good health is a negative predictor of the score of desirability of control. This might seem to be paradoxical, however it could be explained by that the older person with poor health more often have situations that need decision-making related to treatment approaches, medication intake, and diet and lifestyle. In such situations, he/she might feel more desire to control. In congruence with this, a study of elderly adults suffering from chronic kidney disease found that many of them were seeking more information about treatment

options and prognosis as a desire to feel more in control (*Fleishman and Shvartzman, 2022*).

In the present study, older persons' life satisfaction was assessed using the integrity vs despair tool, where its high resolution scores indicate more satisfaction with life. The results demonstrate higher positive items' scores in comparison with the negative items' scores, which yields a positive difference or more resolution, indicating more life satisfaction. In fact, slightly more than three-fourth of them have resolution and thus are satisfied with their life. In this respect, *Hawley (1988)* clarified that a person with low resolution scores of the integrity and despair tool is not satisfied with his/her life with feelings that it was meaningless. In agreement with this result, a study of Ethiopian older persons reported that more than eighty percent of them were satisfied with their life (*Mekonnen et al., 2022*).

According to the present study results, older persons' integrity-despair resolution score is positively influenced by their desirability of control score. This is quite conceivable since the more an individual is motivated to control own life events the more he/she is expected to be satisfied with life. This might also be more evident in the older stages of life where people may tend or be forced to lose control on their lives.

As for the older persons' personal characteristics influencing their resolution score or life satisfaction, the present study identified the level of education and meeting with friends as positive predictors. The positive impact of education on a person's ability to reach to resolution of life conflicts is quite understandable. Moreover, the positive effect of the practice of social activities such as meeting with friends on life satisfaction is logical being an important factor helping the older person to find a meaning for his/her life by sharing views, interests, and even problems. A similar association was reported by *Mekonnen, ital. (2022)* in their study in Ethiopia.

The current study has also measured the feelings of fear of death and dying among older persons. The results indicate generally high scores reflecting a high prevalence of fears and related anxiety among them. In line with these

results, *Elzohairy et al. (2022)* in a study in Egypt demonstrated that more than a half of the older persons were having moderate to severe death anxiety. Conversely, a study in Tanta, Egypt on elderly home residents reported that only around one-fourth of them were having high death fears and anxiety (*Hassan et al., 2019*). The differences among studies could be attributed to the various settings as well as the various tools used in assessing death fear or anxiety.

Examining the relations between the fear death and dying on one hand and life satisfaction as measured by the integrity-despair resolution score on the other hand, revealed no association, whether in correlation or in regression analyses. This lack of association could be attributed to that the fear of death or dying might be equally experienced by those fully satisfied with their life for fear of losing their ephemeral achievements, as well by those dissatisfied with their life and hope to live longer for better achievement. However, in disagreement with our finding, a study in China found that life satisfaction and death anxiety were negatively correlated among rural elderly persons (*Xie and Liu, 2022*). Similar findings were also reported in a study in India (*Alagh, and Ghosh, 2022*). The discrepancy with our study could be attributed to the differences in cultures, and society norms and beliefs. Moreover, the perception of life satisfaction may vary from one person to another as found in a study in Istanbul, Turkey (*Kocatepe et al., 2020*).

Conversely, the present study analyses identified the score of desirability of control as a positive predictor of the average score of fear of death and dying. This signifies that the more the individual is motivated to have control over own life events, the more he/she fears death or dying. This might be explained by that death represents the unknown that cannot be controlled. Thus, such an individual who wishes to have control on everything would be bewildered in face of this unknown as compared with another one who does not care much about controlling life events. However, in contradiction with this, a study of advanced cancer patients in China found that those patients having a sense of control of their life were having less death anxiety (*Liu et al.,*

2022). The contradiction might be attributed to the differences in studied samples, where the Chinese study examined patients in terminal stages.

Meanwhile, the practice of a social activity such as having an NGO work was identified as a significant independent negative predictor of the score of fear of death and dying. This could be attributed to the added value of such activity on the meaning of life for the older person. It may contribute to his/her achievements in life especially at this late stage. In this respect, *Tomioka et al. (2017)* confirmed that the involvement in social work increases one's self-esteem and feeling of having a purpose in life. The finding is in agreement with *Say and Örnek (2020)* whose study of death anxiety and concept of death among Turkish elderly highlighted the importance of social aspects of life in the alleviation of the fear of death among elderly.

Conclusion and Recommendations

In conclusion, older adults' perceived desirability of control seem to have an influence their fears of death/dying, but this latter is not affected by their satisfaction with life. Having social activities can improve their life satisfaction and alleviate their fear anxiety. Therefore, encouraging older people to be socially active through community health nursing programs and interventions is recommended.

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