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Two studies on death anxiety and personal aspirations

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ABSTRACT

Background: According to existential psychology, death awareness and death anxiety are important motivators of human behavior.

Aim: To examine the effect of death anxiety (DA) and mortality salience (MS) on importance of intrinsic aspirations.

Method: In the first correlational study, 457 students completed death anxiety scale (DAS) and aspiration index (AI). Then, to assess the effect of MS on the valuation of intrinsic aspirations in the second study that are experimental and by posttest with control group design, 155 students randomly assigned to experimental (MS + intrinsic aspirations) and control groups.

Results: In the first study were observed respectively a positive and negative association between importance of image and self-acceptance with DA. The results of MANOVA in the second study showed that MS increased importance of intrinsic aspirations in the experimental group. Also, the effectiveness of MS was significant on importance of community contribution.

Conclusion: The results emphasized to awakening role of death awareness on the investing in satisfactory aspirations (intrinsic aspirations) in accordance with the principles of classical views of humanist and existential psychologist and two more recent theories; Self-Determination Theory and Terror Management Theory.

Keywords: Death Anxiety, Mortality Salience, Aspirations

INTRODUCTION

Kasser and Ryan¹ with dividing aspirations to intrinsic (selfacceptance, affiliation and community contribution) and extrinsic (fame, wealth and image) expressing different consequences in result of their valuation and attainment. In accordance with existential psychology as well as positive psychology as a new branch in psychology, the pursuit of positive virtues, aspirations and traits is associated with increased psychological health and greater life satisfaction with^{2,3}. Similarly, the studies in various level of cultural, economic, age and gender showed that relative centrality of extrinsic aspirations because failing to satisfy the psychological needs (autonomy, competence, relatedness) are along with low well-being and against the valuation of intrinsic aspirations are associated by basic psychological needs satisfaction and positive psychological consequences⁴.

Studies have shown that there is an interaction between insecurity caused by the lack of satisfying psychological and physiological needs and relative centrality of extrinsic aspirations. In fact, extrinsic goals are both a sign of underlying insecurity and a sign of coping strategies (though relatively ineffective strategy) that some people apply to healing their insecurities and anxieties including death anxiety (DA)⁵. In this regard, Becker⁶ states that human beings intend to money as a means of immortality and its ability to swelling of the self. Because money can be change the one's natural state of insignificant, helpless, mortal being to a great being, having control, eternity and the importance.

On the other hand, existential thinkers, described death awareness to bittersweet. Because not only is associated with anxiety, fear and avoidance, but also is inspiring and is associated with innovation and helps a person to join to the world beyond one's self⁷. For example, according to Yalom⁸ "though the physicality of death destroys us, the idea of death can save us" or Emmy Van Duerzen-Smith⁹, an existential psychotherapist writing that: "The death is a necessary reminiscent of the life. Only when directly face to face with it, we can take seriously the opportunity to live and make the best use of it".

Altogether, according to the existentialist thinkers and Terror Management Theory (TMT)^{6,10} recalling own death and DA can be to planar motivating different way of behavior from materialism^{11,12}, dogmatism and violence¹³ to spiritualism^{14,15}, altruism and social cooperation¹⁶ that at the end up are along with different implications for health and psychological well-being. According to Jonas, Schimel, Pyszczynski and Greenberg¹⁷ benevolent, generous and compassionate behaviors revive the belief that one's is a valuable member in a full of meaning world. In this way this belief defense of the individual against the mortality awareness and suppressed arousing death cognitions.

Given the above, the present study is trying to examine the relationship between death awareness and DA with extrinsic-intrinsic aspirations in the two studies at Iranian culture. In the first study examine the relationship between extrinsic-intrinsic aspirations and DA in a correlational study and in the second study testing the impact of mortality salience (MS) to the importance of intrinsic aspirations. It is expected that the death awareness such as an awakening and boundary experience respectively leading to more importance on intrinsic aspirations and on the other hand, observing respectively a positive and negative relationships between extrinsic and intrinsic aspirations with DA, because people with high materialism showing more insecurity and DA [18] and extrinsic aspirations are relative ineffective and often short-term coping strategies to reduce the fear of death unlike with intrinsic aspirations⁵.

METHOD

First study. This study was a descriptive study and correlational. 457 Islamic Azad University of Lahijan students (302 women, 121 men and 34 not reported) with an average age of 26.7 and a standard deviation of 8.41 were selected by convenience sampling method.

Second study. This study was an experimental study by post-test design with a control group. 100 Islamic Azad University of Lahijan students selected by convenience sampling method and randomly were assigned to experimental (intrinsic aspirations groups) and control groups according to heuristic method that states at least 30 subjects is necessary to experimental studies. Intrinsic aspirations experimental group include 51 (22 women, 29 men) with an average age of 29.15 and 7.79 standard deviation and control group include 49 (35 women, 13 men and 1 not reported) with an average age of 25.30 and 9.04 standard deviation.

To invoke himself death thoughts to conscious attention of the participants in the experimental groups (MS), were operated according to Greenberg, Pyszczynski, Solomon, Rosenblatt, Weider and colleagues¹⁹. Death thoughts are called by asking participants to answer to two phrase regarding their death: 1. "describe the feelings that the thought of your own death arouses in you" and 2. "Describe what you think will happen to you physically as you die and once you are dead".

Aspiration Index (AI) include 47 items in four dimensions of intrinsic-extrinsic and self-transcendencephysical- self aspirations. Participant should be evaluation the importance and chance of achieving each goal on a 9point Likert scale (1 = not at all, 9 = extremely). In Grouzet, Kasser, Ahuvia, Fernandez-Dols, Kim & et al. [20] in 15 countries, internal consistency of 11 aspirations were .67 to .90. In this study applied the components of importance extrinsic (fame, wealth and image) and intrinsic (selfacceptance, affiliation and community contribution) aspirations. The internal consistency of aspirations in Iranian sample obtained for fame (.83), wealth (.84), image (.81), self-acceptance (.86), affiliation (.82) and community contribution (.76).

Templer Death Anxiety Scale (DAS) having 15 items and is the most widely used scale to measure death anxiety. Participants ranked their answers to a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). The scale's test retest reliability is .83 and internal consistency is .84²¹.

RESULTS

The first study. Shapiro-Wilk test of normality had a normal distribution (sig = .000, .95%). Descriptive indicators of DA and extrinsic-intrinsic aspirations shown in Table 1. The correlation matrix is provided in Table 2. Among all aspirations, there are a positive correlation between DA with importance of image (r = .19, p < .01) and negative

correlation between DA with importance of self-acceptance (r = -.11, p < .05).

The second study. Shapiro-Wilk test of normality had a normal distribution (sig = 0.000, 0.95%). Box's test of equality of covariance matrices was used to check the consistency of the variance-covariance matrix for experimental group (Box's M = 115.09, F = 1.23 and P = .08). In addition, to study the homogeneity of variance was used to Levene's test for equality of variances that are shown in Table 4.

Table 1: Descriptive indicators of death anxiety and importance of extrinsic-intrinsic aspirations

Variable	Number	Mean	SD
Death anxiety	413	2.69	.44
Importance of image	357	6.21	1.65
Importance of wealth	360	6.77	1.65
Importance of fame	366	6.74	1.77
Importance of affiliation	339	7.71	1.15
Importance of self-acceptance	338	7.48	1.19
Importance of community contribution	339	7.44	1.51

Table 2: The correlation matrix of death anxiety and importance of extrinsic-intrinsic aspirations

Variable	1	2	3	4	5	6	7
1. Death anxiety	1						
2. Importance of image	.19**	1					
3. Importance of wealth	.01	.56**	1				
4. Importance of fame	.02	.57**	.66**	1			
5. Importance of affiliation	.06	.39**	.39**	.44**	1		
6. Importance of self-acceptance	11*	.21**	.45**	.41**	.55**	1	
7. Importance of community contribution	04	.29**	.35**	.42**	.54**		1

*p < .05. **p < .01.

Table 3: Descriptive indicators of importance of intrinsic aspirations	
in experimental and control groups	

	Group	Ν	Mean	SD
Importance of affiliation	intrinsic aspirations experimental group	37	7.63	.95
	control group	42	7.33	1.52
	Total	79	7.47	1.28
Importance of self-	intrinsic aspirations experimental group	37	7.74	.86
acceptance	control group	42	7.23	1.48
	Total	79	7.47	1.24
Importance of community contribution	intrinsic aspirations experimental group	37	7.88	1.08
	control group	42	7.21	1.72
	Total	79	7.53	1.48

Table 4: Levene's test for equality of variances

	df1	df2	F	Sig.
Importance of affiliation	1	77	3.40	.06
Importance of self-acceptance	1	77	3.35	.07
Importance of community contribution	1	77	4.96	.02

To determine the significance of effects of MS on importance of intrinsic aspirations was used multivariate analysis of variance (MANOVA). The mean and standard deviation of the experimental and control groups according to intrinsic aspirations reflected in Table 3. Due to elimination of missing values the final number of experimental and control groups reduced. As can be seen in the table, respectively, importance of intrinsic aspirations means is higher in the experimental group compared to control group. In other words, MS has led to enhancing in the importance of intrinsic aspirations. Also, MANOVA showed a significant effect of MS on importance of community contribution (Table 5). Wilks' lambda index represents that intrinsic aspirations are affected by MS (Wilks' lambda = .87, F = .78 and p = .66).

Table 5: MANOVA for the effect of mortality salience on importance of intrinsic aspirations

Description		df	Mean	F	Sig.
			Square		
Mortality	Importance of affiliation	1	1.76	1.06	.30
salience	Importance of self- acceptance	1	5.04	3.33	.07
	Importance of community contribution	1	8.79	4.12	.04

DISCUSSION

We examined the relationship between DA with extrinsicintrinsic aspirations and the impact of MS on importance of intrinsic aspirations in two studies. According to the hypothesis, in the first study, respectively, observed a significant positive and negative correlation between the importance of image and importance of self-acceptance with DA. In addition, the results of the second study showed that MS leads to an enhancement of importance of intrinsic aspirations in the experimental group compared with the control group. Also, the impact of MS was significant on importance of community contribution.

According to the findings in the first study, prior studies have shown that excessive materialism and valuation of extrinsic aspirations unlike with intrinsic aspirations don't effective coping strategies to reduction of DA. For example, Kasser & kasser [18] showed that in the materialistic people there are more insecurities in relation to die, falling and the horror of frightening events and objects. As previously mentioned, extrinsic goals not only are a sign of underlying insecurity but also are a sign of coping strategies (though relatively ineffective strategy) that some people apply to healing their insecurities and anxieties including DA.

Indeed, on the one hand, death awareness cause to anxiety and using proximal (the defensive mechanisms that send the thoughts of death in the out of consciousness, such as denial and suppression) and distal (the defensive mechanisms that give a symbolic immortality, belief of inviolability and presence an ultimate rescuer) defensive mechanisms. On the other hand, such as awakening experience makes the people seeking meaning in their lives and go ahead in genuine manner of life [22]. For example, according to enhancing the importance of intrinsic aspirations particularly community contribution in Iranian culture that was obtained in the second study, Ma-Kellams & Blascovich²³ in two studies showed that after exposure Asian-American people in MS condition, they demonstrate more positive attitudes and more altruistic behaviors to someone in contrary to their cultural norms (a prostitute). Also, participants in the second study showed less blame to someone that was paralyzed in a car accident with no fault. In fact, according to the researchers explain, participants following the death awareness treated in appropriate to their collectivist culture that puts importance on the social cohesion and people's acceptance for their self-esteem.

This study was associated with limitations. First, the design of research prevents that be evaluation the experimental and control groups importance on the intrinsic aspirations before exposure to MS condition. Second, small sample size and third the use of self-report instruments that are associated with bias in answering.

Future research can be providing more and clearer understanding about how death awareness and DA impact in Iranian culture on the valuation of extrinsic-intrinsic aspirations with more accurately examination of the MS mechanism, especially in the levels of explicit and implicit to adopt different values and ways of behavior in Iranian society that has a different condition in terms of cultural, religious and socio-economical than western communities.

CONCLUSIONS

The findings of this study showed that death awareness can be such as a motivator (an awakening experience) caused that people valuation and pursuit healthy intrinsic goals and behaviors in their life that according to Self-Determination Theory (SDT)³, in turn satisfying their psychological needs, strengthening their well-being and according to existential psychology and TMT^{7,8} managing their existential concerns and insecurities such as death, loneliness, meaning and freedom.

Conflict of Interest: "The authors declare that they have no competing interests."

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REFERENCES

- 1 Kasser T, Ryan RM. Further examining the American dream: Differential correlates of intrinsic and extrinsic goals. Personality and Social Psychology Bulletin 1996; 22: 80-87.
- 2 Seyedi Asl ST, Sadeghi K, Bakhtiari M, Ahmadi SM, Nazari Anamagh A, Khayatan T. Effect of Group Positive Psychotherapy on Improvement of Life Satisfaction and The Quality of Life in Infertile Woman. Int J Fertil Steril. 2016;10(1):105-112.
- 3 Deci EL, Ryan RM. The "what" and the "why" of goal pursuits: Human needs and the self-determination of behavior. Psychological Inquiry2000; 11: 227-268.
- 4 SabzehAra M, Ferguson YL, Sarafraz MR, Mohammadi M. An Investigation of the Associations between Contingent Self-Worth and Aspirations among Iranian University Students. Journal of Social Psychology2014; 154: 59-73.
- 5 Kasser T. The High Price of Materialism. MIT Press.

- 6 Becker, E. (1975). Escape from evil. New York, NY: The Free Press; 2002.
- 7 Greenberg J, Koole SL, Pyszczynski T. Handbook of experimental existential psychology. New York, NY: The Guilford Press; 2004.
- 8 Yalom ID. Staring at the sun: Overcoming the terror of death. San Francisco: Jossey-Bass; 2008
- 9 Van Deurzen-Smith E. Everyday mysteries-Existential dimensions of psychotherapy. London, England: Routledge; 1997.
- 10 Greenberg J, Pyszczynski T, Solomon S. The causes and consequences of a need for self-esteem: A terror management theory. In Baumeister, R.F. Public self and private self, pp. 189-212. New York: Springer-Verlag; 1986.
- 11 Kasser T, Sheldon KM. Of wealth and death: Materialism, mortality salience, and consumption behavior. Psychological Science2000; 11: 348-351.
- 12 Jonas E, Sullivan D, Greenberg J. Generosity, greed, norms, and death – Differential effects of mortality salience on charitable behavior. Journal of Economic Psychology2013; 35: 47-57.
- 13 Frischlich L, Rieger D, Hein M, Bente G. Dying the rightway? Interest in and perceived persuasiveness of parochial extremist propaganda increases after mortality salience. Frontiers in Psychology: Evolutionary Psychology and Neuroscience. 2015; doi:10.3389/fpsyg.2015.01222
- 14 Jong J, Halberstadt J, Bluemke M. Foxhole atheism, revisited: The effects of mortality salience on explicit and implicit religious belief. Journal of Experimental Social Psychology2012; 48: 983-989.
- 15 Cohen F. Soenke M, Solomon S, Greenberg J. Evidence for a role of death thought in American attitudes toward symbols

of Islam. Journal of Experimental Social Psychology2013; 49: 189-194.

- 16 Cai F, & Wyer RS. The Impact of Mortality Salience on the Relative Effectiveness of Donation Appeals. Journal of Consumer Psychology2015; 25: 101-112.
- 17 Jonas E, Schimel J, Greenberg J, Pyszczynski T. The Scrooge effect: Evidence that mortality salience increases prosocial attitudes and behavior. Personality and Social Psychology Bulletin2002; 28: 1342-1353.
- 18 Kasser T, Kasser VG. The dreams of people high and low in materialism. Journal of Economic Psychology2001; 22: 693-719.
- 19 Greenberg J, Pyszczynski T, Solomon S, Rosenblatt A, Veeder M, Kirkland S, Lyon D. Evidence for terror management II: The effects of mortality salience on reactions to those who threaten or bolster the cultural worldview. Journal of Personality and Social Psychology1990; 58: 308-318.
- 20 Grouzet FME, Kasser T, Ahuvia A, Dols JMF, Kim Y, Lau S. Ryan R. The structure of goal contents across 15 cultures. Journal of Personality and Social Psychology2005; 89: 5, 800-816.
- 21 McMordie WR. Improving measurement of death anxiety. Psychological Reports1979; 44: 975-980.
- 22 Pyszczynski T, Greenberg J, Solomon S. A dual process model of defense against conscious and unconscious deathrelated thoughts. An extension of terror management theory. Psychological Review1999; 106: 835-845.
- 23 Ma-Kellams C, Blascovich J. Culturally Divergent Responses to Mortality Salience. Psychological Science2011; 22: 1019-1024.