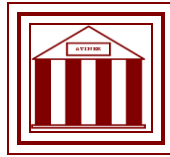# Athens Institute for Education and Research
# ATINER

# ATINER's Conference Paper Series
# PSY2013-0503

# Structure of the Death Obsession Scale among South African University Students

**S Moripe**
**University of Limpopo**
**South Africa**

**S Mashegoane**
**University of Limpopo**
**South Africa**

# An Introduction to
# ATINER's Conference Paper Series

ATINER started to publish this conference papers series in 2012. It includes only the papers submitted for publication after they were presented at one of the conferences organized by our Institute every year. The papers published in the series have not been refereed and are published as they were submitted by the author. The series serves two purposes. First, we want to disseminate the information as fast as possible. Second, by doing so, the authors can receive comments useful to revise their papers before they are considered for publication in one of ATINER's books, following our standard procedures of a blind review.

Dr. Gregory T. Papanikos
President
Athens Institute for Education and Research

# Structure of the Death Obsession Scale among South African University Students

**S Moripe**
**University of Limpopo**
**South Africa**

**S Mashegoane**
**University of Limpopo**
**South Africa**

**Abstract**

The paper examines the psychometric properties of the Death Obsession Scale (DOS) [Abdel-Khalek, A. M. (1998). The structure and measurement of death obsession. *Personality & Individual Differences*, 24, 159-165] among South African university students. Analysis of PCA on the DOS suggests two and three factor solutions for female and male student groups. The full scale also achieved high reliability levels in the two groups. In a bid to evaluate concurrent validity, the DOS correlated with measures of death anxiety and fear, and failed to correlate with measures of religious orientation. Results of the present study indicate that further testing of the association of the DOS is necessary to understand its properties, and the relationship of its underlying construct to known correlates, in contexts either than the ones previous research has so far covered.

**Keywords:**

**Corresponding Author:**

## Introduction

The inevitability of death has led humankind over the centuries to brood over it, constantly developing intricate rituals to cope with its impositions (Budge, 1899/1989; Becker, 1973). Neimeyer, Wittkowski and Moser note that persons' responses to the '*contemplation of or confrontation with death are remarkably varied, ranging from stark fear and threat to neutral acceptance or approach....*' (2004: 311). Nonetheless, researchers seem to have developed a keen interest on the apprehensive concerns of individuals towards death. Abdel-Khalek (1998) reasoned that obsession was an important aspect of death, and followed that by constructing the death obsession scale (DOS) to cover it. In fact, death obsession is considered by Abdel-Khalek to be the third element in the triadic death distress construct that incorporates death depression and death anxiety (Maltby & Day, 2000a).

The 15-item DOS was developed among the University of Alexandria students in Egypt (Abdel-Khalek, 1998). The factor analysis of the Arabic version of the scale produced a three-factor solution consisting of "death rumination", "death dominance" and "death idea repetition", accounting for 47.6%, 9.8% and 8% of the variance, respectively. Since its construction the DOS has been evaluated in various contexts. Maltby (2000a) assessed the English version of the scale among English adults and students, and found identical three factor structures, which in turn replicated Abdel-Khalek's (1998) original structure. Abdel-Khalek and Lester (2003) found a single, "general death obsession" factor for a Kuwaiti student sample, and a two factor ("death rumination" and "death dominance and repetition") solution among American students. Abdel-Khalek, Al-Arja and Abdalla (2006) administered the DOS to Muslim and Christian Palestinian participants in the Bethlehem area. They found a single "general death obsession" factor for women, and three factors ("death ruminations", "death dominance", and "death idea repetition") for men. Rajabi's (2009) analysis of the DOS among Iranian first-entering, undergraduate students yielded the two factors of "death rumination and dominance" and "death idea worry".

Although the DOS appears to meet the required standards for concurrent and discriminant validity, and shows high internal consistency and test-retest reliability (see the methods section), its factor structure apparently varies according to context and samples. Moreover, some of the studies did not factor in gender in their analysis (Abdel-Khalek & Lester, 2003; Maltby, 2000), whilst others did (Rajabi, 2009; Abdel-Khalek et al., 2006; Abdel-Khalek, 1998). Those studies that compared male and female performance on the DOS were not conclusive. For instance, in Abdel-Khalek and Lester's (2003) study there were gender differences in the Kuwait sample and no differences were observed in the American sample. Furthermore, the DOS was compared to a number of correlates. Notably, the DOS was positively related to intrinsic religiosity and the relationship was statistically significant; and on the other hand, it was significantly, negatively related to both extrinsic-personal and extrinsic-social religiosity (Maltby & Day, 2000b).

The DOS is potentially useful in the South African context. For that reason, this study sought to verify its factor structure with students of a predominantly Black institution in South Africa, taking into account gender. Establishing factor structure is in itself important because more precise measures are encouraged in situations that require them (Neimeyer et al., 2004). Furthermore, the study intended to determine the nature of the relationship of the DOS to death anxiety, fear and religiosity. The relationship between religiosity and death anxiety was also investigated since the latter was expected to relate to death anxiety the same way it would with death obsession.

## Method

### Participants

This study used a convenience sample of students from a predominantly Black South African university in Limpopo. Of the 328 students who volunteered to participate after being appropriately informed about the study, 108 (66.7; 6 did not provide an answer on this item) came from a rural background, 211 (64.3%) were female and 117 (35.7%) were male (2 did not specify their gender). Although the sampling was hardly randomized, these parameters nearly reflected proportions of the student-body composition with respect to domicile and gender. Almost all (99.4%) the students were single. They had an average age of 21.02 years (SD = 2.91; age range = 17—42 yrs.). Two hundred and fourteen (65.2%) were in their first level of study, 29 (8.8) in their second level, 84 (25.6%) in their third level and 1 in his fourth level of study. Most of the students reported that they were Christians (16/5% declared that they were not religious at all), and the single largest denomination (cited by 31.3% of the responding students) was the Zion Christian Church, one of the largest Black, traditional churches in Southern Africa.

### Measures

### DOS (Abdel-Khalek, 1998)

The DOS is a 15-item measure responded to on a 5-point Likert-type rating scale ranging from $1 = No$ to $5 = Very\ Much$. The measure has yielded high internal consistency (αs = 0.90s) in different samples (Abdel-Khalek & Lester, 2003; Maltby & Day, 2000a; Abdel-Khalek, 1998), and demonstrated excellent test-retest reliability, over a one-week period, for male and female students ($rs$ = 0.90s; Abdel-Khalek, 1998). The total score of the DOS positively correlated with both death depression and death anxiety ($rs$ = 0.568 & 0.617, $ps$ < 0.01, respectively), and neuroticism but not extraversion from the Revised Eysenck Personality Questionnaire, demonstrating concurrent validity (Maltby & Day, 2000a; Abdel-Khalek, 1998). Discriminant validity

was established when the scale's correlations with other death distress-related scales was larger than its relations with general obsession, anxiety and depression scales; furthermore, discriminant validity was shown in the scale's positive association with neuroticism and lack of relationship with extraversion (Maltby & Day, 2000a).

*Collett-Lester Fear of Dying Scale (CLS; Lester & Abdel-Khalek, 2003)*

The CLS is a 28-item, measure designed to assess death fear along four dimensions, namely, one's own death, one's own dying process, the death of others, and the dying process of others. Each dimension is measured with seven items on a 5-point scale ranging from 5 (Very) to 1 (Not)(Lester & Abdel-Khalek, 2003). The scale as a whole is sometimes considered a general measure of death anxiety. The reliability estimates of the measure in this study were $\alpha$s = 0.773, 0.714, 0.708 and 0.781 for the "your own death", "your own dying", "the death of others" and "the dying of self" subscales, respectively.

*Age-Universal I-E Scale-12 (I-E 12; Maltby, 1999)*

The I-E 12 is a 12-item measure which is an improvement of the Gorsuch and Venable (1983) intrinsic/extrinsic measure of religiosity. It consists of three religious orientation categories, namely, I (e.g., "My whole approach to life is based on my religion", Ep (e.g., "Prayer is for peace and happiness") and Es (e.g., I go to church mainly because I enjoy seeing people I know there"). Items of the I-E 12 are answered on a 3-point response format of "Yes", "Not certain" and "No". The reliability of the scale in this study was estimated at KR-20 = 0.728 for I, KR-20 = 0.444 for Ep, and KR-20 = 0.531 for Es. The Ep subscale was retained as it is because item-to-total correlation analysis demonstrated that all the items of the scale contributed significantly and positively to its overall reliability.

*Fear (Jackson, 2009)*

The fear scale, first used by Jackson (2009), consists of seven items measured on a 5-point Likert-type scale anchored from completely disagree = 1 to completely agree = 5. Items of the scale include "I think the world is not a safe place" and "I am not scared of mice" (reverse scored). The reliability of the scale was estimated at $\alpha$ = 0.487 in this study. Inspection of item-to-total correlation analysis identified item 4, one of the two reverse-scored items of the scale, as a problematic item. Subsequent to the removal of the item, reliability increased to $\alpha$ = 0.534. For purposes of analysis, the scores on the scale were reverse scored to key them in the same direction as the rest of the measures in this study.

**Procedure**

Measures were anonymously completed by groups of students once the study was explained to them. The students completed full questionnaires outside of their normal university hours. None of them received any form of compensation whatsoever for taking part in the study. Once they completed the task, they received immediate debriefing.

**Results**

*Comparison of female and male scores on the DOS*

The first step in data analysis was to compare female and male average scores on the DOS (table 1). Although all the effect sizes of the comparisons were not large ($d < 0.5$), most of them were medium ($d > 0.2$) and their respective probability values were less than the critical level of significance. Females generally recorded higher DOS scores than their male counterparts. For purposes of the study, analysis was then conducted taking into account the respondents' gender.

*DOS factor structure of females and males*

Before the factor structure of the DOS could be investigated for female participants, the data was checked to see if it did not violate any analytic assumptions. The kurtosis and skewness of the variables barely reached 2. The ratio of respondents to variables was, at 14.1 to 1, above the minimum required. The correlation matrix formed from the DOS items had a large number of correlation coefficients above 0.30. In fact, only 15 of them fell below the 0.30 threshold. The Kaiser-Meyer-Olkin measure of sampling adequacy (MSA) for the whole scale was 0.92, and for each variable three were in the higher 0.80s and the rest were in the 0.90s (marvellous). The probability of the Bartlett test of sphericity was less than the critical level of significance. All these observations meant that the data could be used to extract factors. Items 2 ("The idea that I will die at a young age dominates me"), 1 ("Some questions about death come to my mind which I am unable to answer"), 12 ("I think about death continually") and 10 ("I find myself rushing to think about death") were progressively removed after inspection of communalities because the factor solution explained less than half (<50%) of the original (variables') variances.

Table 2 shows the results of the final exploratory PCA conducted for the female respondents in this study.[1] A two-factor solution was obtained, and

---

[1] The decision to use the oblique rotation procedure was further justified by the presence of more than 75% of correlations in the correlation matrix exceeding 0.32, suggesting, according to Tabachnick and Fidell's direction, that there is '*10% (or more) overlap in variance among*

it explained 49.22% (factor 1) and 10.88% (factor 2) of variance. Factor 1 was named "death ruminations", as in Maltby and Day (2000) and Abdel-Khalek (1998), and factor 2 was named "apprehension". Chronbach's α for the two factors was estimated at 0.87 and 0.74, respectively, and they correlated at $r = 0.66$, $p < 001$.

A check similar to the one done on the data of female participants was conducted to determine the factorability of the male participants' data. The data did not have problems of elevated skewness and kurtosis. Although the ratio of cases to variables was less than ideal, it was acceptable at 7.6 to 1. A large number of correlations in the correlation matrix constructed from the scale items were above 0.30. The MSA for the whole DOS was 0.88, considered to be in the meritorious region, and for individual variables it ranged from a low of 0.79 to a high of 0.93. The probability for Bartlett test of sphericity was less than the level of significance. However, not all items recorded the required communality of 0.50 and above for male participants. Item 9 ("I have exaggerated concern with the idea of death") was removed on the first iteration and item 8 ("The idea of death overcomes me") was removed on the second iteration.

For the male participants, a final three-factor solution fitted the data well, and could be interpreted (see table 2). It explained 41.10% (factor 1), 9.54% (factor 2) and 8.97% (factor 3) of variance. The first factor was named "death ruminations". Factor 2, which was identical to factor 2 of the final female factor structure, was named "apprehension", and factor 3 was named "comprehensibility of death". Chronbach's α for the three factors was estimated at 0.86, 0.74 and 0.58, respectively. The correlations between factor 1 and factor 2 was $r = 0.59$, between factor 1 and factor 3 was $r = 0.45$ and between factor 2 and factor 3 was $r = 0.34$; all correlations were statistically significant at $p < 0.001$.

*DOS and its correlates, and the association between religiosity and death obsession*

The DOS, a measure of death obsession in this study, was a variable in a correlation analysis that included some known correlates, namely, death anxiety and religiosity. Fear was also added based on the rationality that it would be an element of death anxiety or be associated with it. Analysis was conducted separately for females and males. For females (see table , the two factors of Death ruminations and Apprehension correlated positively and statistically significantly with three subscales of the CLS ("your own death", "your own dying" and "the death of others"), and was not associated to "the dying of others" and the total score of the CLS ($p$s $> 0.05$). The correlations between Death ruminations and fear were marginal ($p = 0.10$), and Apprehension was not related to fear ($p > 0.05$). Both Death ruminations and

---

*factors, enough variance to warrant oblique rotation unless there are compelling reasons for orthogonal rotation'* (2007: 646).

Apprehension were not associated to Ep and Es, and death rumination was not associated to I ($p > 0.05$) whereas Apprehension was related to it ($p < 0.05$). Both Ep and Es were not associated to death anxiety (ps $> 0.05$).

Male correlational analysis shows that death obsession is associated with almost all the scales of death anxiety, except the "death of others" subscale. In fact, unlike in the female analysis, some of the correlation coefficients reached the 0.40s, and death obsession was correlated with the total score of CLS. Death obsession was also related to fear (ps $< 0.05$). However, death obsession was not related to any of the religiosity components (ps $> 0.05$). I and Ep were related to the "death of others", and Es was related to all forms of death anxiety as measured by the CLS, except "your own death".

Although religiosity (I, Ep and Es) was mostly not related to death obsession, we examined the three religiosity variables as potential mediators using a bootstrapping method. All the calculated 95% confidence intervals based on 5000 bootstrap samples include zero. Therefore, I, Ep and Es do not mediate the effect of death obsession (independent variable) on death anxiety (the dependent variable).

## Discussion

From the start, the DOS was found to be multi-factored (Abdel-Khalek, 1998). Although a single factor was found (Abdel-Khalek & Lester, 2003), the factor analysis of the scale commonly yields two or three factors (Rajabi, 2009; Abdel-Khalek et al., 2006; Maltby, 2000a; Abdel-Khalek, 1998). The present study supports the multi-factor finding in the factor analysis of the DOS. Also, gender seems to determine the number of factors. However, it appears that some of the items of the DOS may be problematic when the scale is used among students in South Africa. A number of items were discarded during factor analysis.

Correlates of death obsession were also investigated among students in this study, and the findings were mixed. As expected, death obsession was related to death anxiety, since it is its aspect (Abdel-Khalek, 1998). Logically, correlates of death anxiety should also correlate the same way with death obsession. One such variable is religiosity. Death obsession was not associated to almost all the dimensions of religiosity measured in this study, contradicting a common trend (Neimeyer et al., 2004). The variable of fear also yielded surprising results. Whereas it was related to death obsession among males, the same did not apply among females. On the other hand, fear was not related to almost all dimensions of death anxiety measured in this study. On the whole, the results of this study suggest that the students understand and conceptualize death anxiety and death obsession differently.

The results of this study need to be replicated in South Africa. The replication should also be conducted with other groups either than students.

## References

Abdel-Khalek, A. M. (2002). Death obsession in Egyptian samples: Differences among people with anxiety disorders, schizophrenia, addictions, and normals. *Death Studies, 26*, 413-424.

Abdel-Khalek, A. M. (1998). The structure and measurement of death obsession. *Personality & Individual Differences, 24*, 159-165.

Abdel-Khalek, A. M., N. S. Al-Arja, & T. Abdalla. (2006). Death obsession in Palestinians. *Death Studies, 30*, 203-215.

Abdel-Khalek, A. M., & D. Lester. (2003). Death obsession in Kuwaiti and American college students. *Death Studies, 27*, 541-553.

Abdel-Khalek, A. M., & J. Maltby. (2008). The comparison of predictors of death obsession within two cultures. *Death Studies, 32,* 366-377.

Becker, E. (1973). *The fear of death*. New York: Free Press.

Budge, E. A. W. (1899/1989). *The book of the dead*. London: Arkana Press.

Gorsuch, R. L., & G. D. Venable. (1983). Development of an 'age universal' I-E scale. *Journal for the Scientific Study of Religion,* 22, 181-187.

Jackson, C. J. (2009). Jackson-5 scales of revised Reinforcement Sensitivity Theory (r-RST) and their application to dysfunctional real world outcomes. *Journal of Research in Personality*, 43 (2009) 556–569.

Lester, D. & A. Abdel-Khalek. (2003). The Collett-Lester fear of death scale: A correction. *Death studies*, 27, 81-85.

Maltby, J., & L. Day. (2000a). The reliability and validity of the Death Obsession Scale among English university and adult samples. *Personality & Individual Differences*, *28*, 695-700.

Maltby, J., & L. Day. (2000b). Religious orientation and death obsession. *Journal of Genetic Psychology, 16*, 122-124.

Maltby, J. (1999). The internal structure of a derived, revised, and amended measure of the religious orientation scale: The 'Age-Universal' I-E Scale-12. *Social Behavior & Personality*, **27**, 407-412.

Mudau, T., S Moripe, & S Mashegoane. (2011). Religiosity and demographic correlates of death anxiety in Thulamela, South Africa. *Theologia Viatorum: Journal of Theology & Religion in Africa, 35, 231-250.*

Neimeyer, R. A., J. Wittkowski, & R. P. Moser. (2004). Psychological research on death attitudes: An overview and evaluation. *Death Studies, 28*, 309-340. **doi**: 10.1080/07481180490432324

Rajabi, G. (2009). The psychometric properties of death obsession scale in freshman undergraduate students. *Journal of Applied Sciences, 9, 360-365.* **doi:** 10.3923/jas.2009.360.365

Tabachnick, B. G., & L. S. Fidell. (2007). *Using multivariate statistics* (5th ed.). Upper Saddle River, NJ: Pearson Allyn & Bacon Press.

**Table 1:** *Comparison of female (n = 211) and male (n = 114) average scores on the DOS* $^{Ŧ}$

| | | *Female* | *Male* | *t* | *df* | *p* | *d* |
|---|---|---|---|---|---|---|---|
| 1 | Some questions about death come to my mind which I am unable to answer. | 2.91 (1.332) | 2.49 (1.358) | 2.716 | 323 | 0.007 | 0.31‡ |
| 2 | The idea that I will die at a young age dominates me. | 2.45 (1.332) | 2.49 (1.503) | 2.337 | 251 | 0.020 | 0.26‡ |
| 3 | I fail to dismiss the notion of death from my mind. | 2.33 (1.388) | 2.05 (1.120) | 1.967 | 276 | 0.050 | 0.22‡ |
| 4 | Thinking about death preoccupies me. | 2.38 (1.414) | 1.97 (1.237) | 2.680 | 259 | 0.008 | 0.31‡ |
| 5 | I find it greatly difficult to get rid of thoughts about death. | 2.35 (1.421) | 1.96 (1.189) | 2.602 | 269 | 0.010 | 0.29‡ |
| 6 | I recall alarming and painful aspects of death. | 2.55 (1.391) | 2.04 (1.237) | 3.398 | 256 | 0.001 | 0.38‡ |
| 7 | I feel I am compelled to think about death | 2.13 (1.218) | 2.10 (1.072) | .232 | 323 | *ns* | 0.03 † |
| 8 | The idea of death overcomes me. | 2.06 (1.237) | 1.72 (1.085) | 2.449 | 323 | 0.015 | 0.29‡ |
| 9 | I have exaggerated concern with the idea of death. | 2.16 (1.320) | 2.02 (1.030) | 1.048 | 283 | *ns* | 0.12 † |
| 10 | I find myself rushing to think about death. | 1.84 (1.208) | 1.64 (1.014) | 1.572 | 268 | *ns* | 0.18 † |
| 11 | I fear to be dominated by the idea of death. | 2.60 (1.481) | 2.30 (1.463) | 1.771 | 323 | 0.077 | 0.20 † |
| 12 | I think about death continuously. | 1.84 (1.118) | 1.76 (1.050) | .595 | 323 | *ns* | 0.07 † |
| 13 | Thinking about death causes me much tension. | 2.42 (1.443) | 1.95 (1.120) | 3.251 | 284 | 0.001 | 0.35‡ |
| 14 | The recurrence of the idea of death annoys me. | 2.60 (1.429) | 2.39 (1.280) | 1.362 | 254 | *ns* | 0.15 † |
| 15 | A feeling that I will die suddenly overtakes me | 2.44 (1.444) | 2.10 (1.426) | 2.060 | 323 | 0.040 | 0.24‡ |
| | DOS$^{Ŧ}$ Total Score | 35.06 (13.652) | 30.56 (11.342) | 3.173 | 270 | 0.002 | 0.35‡ |

Note:  Ŧ =death obsession scale; *d* = effect size, † = small (0.2), ‡ = medium (0.5).

**Table 2: Factor structure of the DOS items for females and males using PCA with direct oblimin rotation**

| | DOS items | Factors | | | | |
|---|---|---|---|---|---|---|
| | | Females (n = 211) | | Males (n = 114) | | |
| | | F1 | F2 | F1 | F2 | F3 |
| 1 | Some questions about death come to my mind which I am unable to answer. | | | | | .813 |
| 2 | The idea that I will die at a young age dominates me. | | | | | .748 |
| 3 | I fail to dismiss the notion of death from my mind. | .791 | | .663 | | |
| 4 | Thinking about death preoccupies me. | .773 | | .698 | | |
| 5 | I find it greatly difficult to get rid of thoughts about death. | .820 | | .742 | | |
| 6 | I recall alarming and painful aspects of death. | .739 | | .681 | | |
| 7 | I feel I am compelled to think about death | .821 | | .718 | | |
| 8 | The idea of death overcomes me. | .815 | | | | |
| 9 | I have exaggerated concern with the idea of death. | .734 | | | | |
| 10 | I find myself rushing to think about death. | | | .731 | | |
| 11 | I fear to be dominated by the idea of death. | | .768 | | .731 | |
| 12 | I think about death continuously. | | | .721 | | |
| 13 | Thinking about death causes me much tension. | | .678 | | .708 | |
| 14 | The recurrence of the idea of death annoys me. | | .797 | | .804 | |
| 15 | A feeling that I will die suddenly overtakes me | | .670 | | .728 | |

Note:    F = Factor

14

**Table 3 (a): Female correlations**

|   |   |   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|----|----|
| 1 | Death ruminations | *r* | 1 | | | | | | | | | | |
|   |   | *p* | | | | | | | | | | | |
| 2 | Apprehension | *r* | 0.657 | 1 | | | | | | | | | |
|   |   | *p* | 0.001 | | | | | | | | | | |
| 3 | "your own death" | *r* | 0.213 | 0.319 | 1 | | | | | | | | |
|   |   | *p* | 0.002 | 0.001 | | | | | | | | | |
| 4 | "your own dying" | *r* | 0.222 | 0.342 | 0.492 | 1 | | | | | | | |
|   |   | *p* | 0.001 | 0.001 | 0.001 | | | | | | | | |
| 5 | "death of others" | *r* | 0.201 | 0.294 | 0.255 | 0.400 | 1 | | | | | | |
|   |   | *p* | 0.003 | 0.001 | 0.001 | 0.001 | | | | | | | |
| 6 | "dying of others" | *r* | 0.026 | -0.046 | -0.077 | -0.005 | 0.070 | 1 | | | | | |
|   |   | *p* | *ns* | *ns* | *ns* | *ns* | *ns* | | | | | | |
| 7 | CLS | *r* | 0.097 | 0.063 | 0.130 | 0.209 | 0.248 | 0.966 | 1 | | | | |
|   |   | *p* | *ns* | *ns* | 0.060 | 0.002 | 0.000 | 0.000 | | | | | |
| 8 | Fear | *r* | 0.124 | 0.089 | -0.027 | 0.085 | 0.125 | -0.007 | 0.012 | 1 | | | |
|   |   | *p* | 0.071 | *ns* | *ns* | *ns* | 0.070 | *ns* | *ns* | | | | |
| 9 | I | *r* | -0.073 | -0.162 | -0.088 | -0.220 | -0.128 | 0.049 | -0.001 | 0.048 | 1 | | |
|   |   | *p* | *ns* | 0.019 | *ns* | 0.001 | 0.065 | *ns* | *ns* | *ns* | | | |
| 10 | Ep | *r* | 0.082 | 0.057 | 0.084 | 0.079 | -0.056 | 0.061 | 0.072 | 0.040 | 0.152 | 1 | |
|   |   | *p* | *ns* | *ns* | *ns* | *ns* | *ns* | *ns* | *ns* | *ns* | 0.028 | | |
| 11 | Es | *r* | 0.078 | 0.037 | 0.057 | -0.072 | 0.021 | -0.019 | -0.017 | 0.114 | 0.017 | 0.018 | 1 |
|   |   | *p* | *ns* | *ns* | *ns* | *ns* | *ns* | *ns* | *ns* | *ns* | *ns* | *ns* | |

**Table 3(b): Male correlations 114-117**

| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Death ruminations | r | 1 | | | | | | | | | | | |
| | | p | | | | | | | | | | | | |
| 2 | Apprehension | r | 0.593 | 1 | | | | | | | | | | |
| | | p | 0.001 | | | | | | | | | | | |
| 3 | Comprehensibility of death | r | 0.448 | 0.340 | 1 | | | | | | | | | |
| | | p | 0.001 | 0.001 | | | | | | | | | | |
| 4 | "your own death" | r | 0.297 | 0.385 | 0.250 | 1 | | | | | | | | |
| | | p | 0.001 | 0.000 | 0.007 | | | | | | | | | |
| 5 | "your own dying" | r | 0.298 | 0.419 | 0.284 | 0.601 | 1 | | | | | | | |
| | | p | 0.001 | 0.001 | 0.002 | 0.001 | | | | | | | | |
| 6 | "death of others" | r | 0.112 | 0.227 | 0.255 | 0.368 | 0.477 | 1 | | | | | | |
| | | p | ns | 0.015 | 0.006 | 0.001 | 0.001 | | | | | | | |
| 7 | "dying of others" | r | 0.254 | 0.304 | 0.289 | 0.457 | 0.671 | 0.615 | 1 | | | | | |
| | | p | 0.006 | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | | | | | | |
| 8 | CLS | r | 0.303 | 0.416 | 0.334 | 0.764 | 0.856 | 0.744 | 0.856 | 1 | | | | |
| | | p | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | | | | | |
| 9 | Fear | r | 0.282 | 0.250 | 0.248 | -0.010 | 0.076 | 0.113 | 0.076 | 0.076 | 1 | | | |
| | | p | 0.002 | 0.007 | 0.008 | ns | ns | ns | ns | ns | | | | |
| 10 | I | r | -0.113 | -0.095 | -0.063 | 0.013 | 0.030 | 0.223 | 0.099 | 0.107 | 0.056 | 1 | | |
| | | p | ns | ns | ns | ns | ns | 0.017 | ns | ns | ns | | | |
| 11 | Ep | r | -0.038 | 0.054 | 0.037 | 0.031 | 0.077 | 0.216 | 0.121 | 0.133 | 0.184 | 0.419 | 1 | |
| | | p | ns | ns | ns | ns | ns | 0.021 | ns | ns | 0.050 | 0.001 | | |
| 12 | Es | r | 0.027 | 0.031 | 0.062 | -0.042 | -0.195 | -0.217 | -0.218 | -0.207 | -0.235 | 0.151 | 0.059 | 1 |
| | | p | ns | ns | ns | ns | 0.039 | 0.021 | 0.020 | .028 | 0.012 | ns | ns | |