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# Moral emotions and moral distress. Do religiousness and sense of coherence mediate or moderate this relationship?

Thesis, MSc Clinical Psychology


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**Moral emotions and moral distress. Do religiousness and sense of coherence moderate this relationship?**

## Abstract

*Introduction* The purpose of this study is to investigate the relationship between moral emotions -guilt and shame- and moral distress. Moral distress is said to occur when one acknowledges the right thing to do but is unable to act upon it. Moral emotions are found to be significant predictors of the severity of moral distress. Moreover, religiousness and Antonovsky's Sense of Coherence (SOC) have repeatedly been associated with stress outcome. The aim of this study is to investigate the relationship between moral emotions and moral distress. Secondly, the mediating or moderating role of religiousness and SOC is examined. *Methods*. Data collection was held in April 2022 via online questionnaires on platform Qualtrics Survey Solutions. The sample consists of 77 Greek participants. For each participant, data were collected about socio-demographic profile and religious beliefs. Cognitions following a traumatic moral conflict were assessed through MR-MI, MIAS scales. SOC was measured using the short version SOC-13. *Results*. Pearsons's R and regression analyses showed that moral distress is positively correlated and significantly predicted by moral emotions. Moral distress was also negatively correlated with SOC. Moderation analysis indicated that the relationship between moral emotions and moral distress only really emerges in people with low or average levels of SOC. Results for mediations and the variable religiousness were non-significant. *Discussion* The research highlights the significant relationship between moral emotions, SOC and moral distress and through empirical data points out the importance of addressing SOC before directly dealing with traumatic moral distress.

*Keywords:* Guilt, Shame, Moral emotions, Moral distress, Moral injury, Religiousness, Sense of Coherence

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## Introduction

### Moral distress

Moral distress has engaged researchers' interest, especially with respect to the width of its causes and its alternative manifestations. Moral distress was first defined by Jameton (1993) and it was addressing to nursing. Specifically, the definition of the term that Jameton formulated is "when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action." (Jameton, 1993). Namely, moral distress is the internal conflict that one confronts, when he/she is practically forced to proceed to immoral decisions, even though he/she recognizes the right thing to do, because of his/her poor power on contextual constraints. (Jameton, 1993; Kelly, 1998; Morley, 2018).

Moral distress seems to occur a lot within the workplace environment. Some work circumstances, that have been found to increase moral distress, are: a) organizational aspects: ethical climate, difficult collaboration, job characteristics (i.e. excessive workload, not enough time) and b) poor structural empowerment, psychological empowerment, autonomy, and poor access to resources (Lamiani et al., 2017).

Moral distress, which is powered by moral dilemmas and moral frustrations, may arise existential questioning or/and may harm directly one's sense of self. Thus, moral distress is capable of being traumatic by causing a severe moral injury (Lentz, 2021) (Fig. 1). Stein et al. (2012) support that injury by a distressing moral event can be stronger than injury by a distressing non-moral event because the former emanates from severe shame, social withdrawal, and a failure to forgive the self. They, also, suggest that events that are incompatible with self-schema are difficult to process, creating unwanted intrusions.

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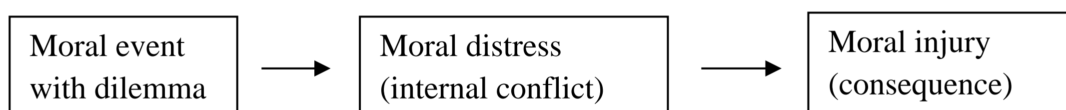
**Figure 1.**

*Model that illustrates the way moral dilemma, moral distress and moral injury are related to each other*




**Moral injury**

While moral distress may be temporary and resolves on its own, it may evolve into moral injury (Norman et al., 2021). "Moral injury is a particular type of trauma characterized by guilt, existential crisis, and loss of trust that may develop following a perceived moral violation." (Jinkerson, 2016). Moral injury is the consequence when unexpected traumatic life events, which are related to perpetrating, failing to prevent, or witnessing to actions, "transgress deeply held moral beliefs and expectations" (Litz et al., 2009). Potentially morally injurious events (PMIEs) are less frequent and more impactful than moral stressors. It has been proposed that moral injury occurs when an individual fails to cope with the moral emotions (Litz & Kerig, 2019).

Its main difference with moral distress is that people who struggle to adapt to moral injury believe that they are defined by the experience. In contrast, even though moral distress may be related with distressing moral emotions, the adaptation to that does not necessarily require making enduring self-attributions to the unwanted outcome. Litz & Kerig (2019) consider moral distress as less severe in relation to moral injury (Fig. 2).

It has been observed that moral injury notably affects the wide occupational branch of public safety personnel (PSP: e.g., border services officers, the military, public safety

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communications officials, correctional workers, firefighters, paramedics, police) (Papazoglou & Chopko, 2017; Carleton, 2021).

PSP are in charge of numerous responsibilities that concern other people's lives. Regularly, they get involved into uncertain or ambiguous situations on duty, where it is necessary to make a decision. Should their final decisions oppose to their personal ethics and values, the psychological impact may be traumatic and devastating (Angehrn et al., 2020). PMIEs may be death-related situations, homicides, handling/uncovering human remains, severely wounded victims that the person was not able to help as well as, violence, the inability to act for the protection of someone, moral compromise, personnel or organizational betrayals, and challenging homecomings for the military (Griffin et al., 2019; Lentz et al., 2021).

Numerous studies have indicated a positive relationship between moral distress/moral injury and professional attitudes, such as job satisfaction, abandonment of position, engagement, and burnout (Cardoso et al., 2016; Lamiani et al., 2017). Additionally, moral distress/injury have, also, been correlated with guilt, shame, alcohol and drug abuse, severe recklessness, self-handicapping behaviors and demoralization (Litz et al., 2009), moral concerns, religious struggles, loss of religious faith/hope, hopelessness, difficulty forgiving, loss of trust, and self-condemnation (Jamieson et al., 2020; Drescher et al., 2011; Flipse Vargas et al., 2013), anger, loneliness, feelings of powerlessness, emotional withdrawal, physical symptoms, depression, anxiety, PTSD and self-harming (Koenig et al., 2018; Kopacz et al., 2019).

As detailed below, we will take a more in-depth view into the different aspects that are related to moral injury, namely guilt and shame.

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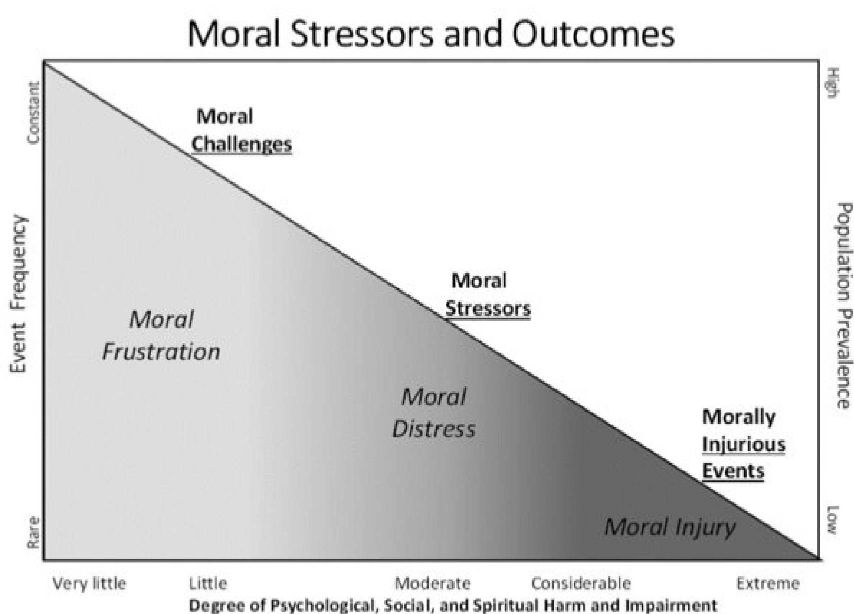
**Figure 2**.

*Diagram of cumulative moral distress.*




*Note*. Adapted from "Exploring moral distress in Australian midwifery practice", by W. Foster, L. McKellar, J.A.Fleet, L.Sweet (2022). Exploring moral distress in Australian midwifery practice. *Women and Birth*, *35*(4), 349-359.

## Guilt & shame: the moral emotions

As mentioned, guilt and shame are considered two of the core symptoms of moral injury. Moral emotions, such as guilt and shame play a significant role in the decision-making process and in the regulation of social behavior (Shen, 2018; Migliore et al., 2019).

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Tangney (2007) reports that: “People’s moral standards are dictated in part by universal moral laws, and in part by culturally specific proscriptions. Guilt feelings arise when the internalized moral authority norms and conventions are violated through our behaviors. Shame is triggered when an individual’s behavior violates general social norms with the consequent experience of being “flawed and lesser-than” (Litz & Kerig, 2019). Feelings of shame bring about a sense of shrinking or of “being small” to the person, which are usually accompanied by a sense of worthlessness and powerlessness (Tangney, 2007).

These two moral emotions seem to be considered as similar, but, they, actually generate different behavioral and emotional reactions. Namely, guilt creates a tendency to the individuals to correct their mistakes, while shame creates a tendency to conceal or refute the ethical mistake that they committed (Shen, 2018). Also, shame is regarded much more devastating than guilt due to its painful effects on one’s core self. Guilt, on the other hand, is a less painful experience because just unethical behaviors are the object of conviction and not the entire self (Treeby & Bruno, 2012).

There is evidence that moral injurious events are related with moral emotions. Specifically, a research with Vietnam veterans showed that they still experienced severe guilt resulting from exposure to wartime traumatic experiences (Kubany et al., 1995). Furthermore, guilt and shame have also been significant predictors of various psychopathologies, such as suicidal ideation and suicide, PTSD and depression (Kubany et al., 1995).

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### The factor of Religiousness

Moral injury is a consequence of violations of values and that values are related to socialization, i.e. related to religiousness and the belief that the world is meaningful, comprehensible and manageable (SOC). The formation of moral injury has a historical origin from spiritual, religious, and philosophical systems. (Tick, 2012). Religiousness is regarded as the starting point in developing the deontological evaluation skill, since religious ideology indicates the “right” and the “wrong” (Clark & Dawson, 1996).

On the one side, research in veterans has indicated that spiritual distress (e.g., feeling abandoned by God, perceived punishment or divine retribution for sin) is significantly related with PTSD (Evans et al., 2017). A powerful explanation is that religion teachings arouse feelings, such as guilt, shame and thoughts of being a sinner which may be intolerable (Evans et al., 2017). On the other side, religiousness “evokes a sense of meaning or purpose and is considered as a resistance resource as it provides a cognitive scheme in which one can find answers to difficult existential questions (Racklin, 1998; Anderson & Burchell, 2021).

A study (Wang et al., 2018) found that discrepancy from God was positively correlated with negative affect, shame and guilt. Another research showed that spirituality is a moderator between hopelessness/ depression and suicidality, featuring the importance of spirituality as a protective factor against hopelessness, depression, and suicidal behavior (Talib & Abdollahi, 2017).

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## The factor of Sense of Coherence

The Sense of Coherence (SOC) theory by Antonovsky (1987) is an attempt to explain why some people successfully manage stress and stay healthy while others collapse. The stronger the SOC, the more likely a person is capable of coping with life stressors. SOC consists of three dimensions: a) Comprehensibility, which deals with the extent to which a person sees the world as predicted and is able to activate the resources needed to cope, b) Manageability, which refers to understanding the problems and possessing the demanding resources to cope successfully, c) Meaningfulness, which relates to the belief that these coping makes sense. SOC is therefore a coping method that enables people to manage stress (Ando & Kawano, 2018). Individuals with strong SOC scores are able to manage stress in a more health-promoting way.

The SOC has been related with burnout and job dissatisfaction (Eriksson et al., 2019). Although, SOC may be important to cope with stress, the relationship between moral distress and SOC is not yet clear.

To my knowledge, the association between moral distress and the factors of religiousness and SOC are not yet well documented. Also, a lot of research has been conducted on high risk professions, but it is important to get a better understanding of moral distress by examining it in the general population. That would be important because science would be able to apply knowledge for moral injury to a broader set of situations occurring. The purpose of the

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present study is to examine the relationship between the level of moral distress and the moral emotions in the normal population. Furthermore, the mediating and moderating role of religiousness and SOC between moral emotions and moral distress will be investigated. We hypothesize that the higher the moral emotions, the higher level of moral distress, since moral distress is made up of emotions which occur when it is not possible to do the right thing. We, also, hypothesize that high SOC and religiousness will predict a less strong relationship between moral emotions and moral distress. Based on Antonovsky's theory, that is because SOC and religiousness are both considered as "general resistance resources" (Encarnação et al., 2017) that provide a resilience cognitive scheme in which one can find answers to difficult existential questions that moral dilemmas may arise and, thus, experience less moral conflicts.

## Methods

### Design

For this cross-sectional study single data collection was held in April 2022 via online questionnaires on platform Qualtrics Survey Solutions. Approval for this study was obtained from the University of Utrecht. The questionnaires could only be entered after reading the provided information about the study and obtaining an online consent from the participants. Participants were allowed to terminate the survey at any time they desired. The survey was anonymous, and confidentiality of information was assured.

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## Participants

Participants were recruited by posting the online survey on several social media platforms. A total of 94 participants were excluded from the analyses due to missing data. The final effective sample consisted of 77 Greek participants from the general population. Participants provided demographic data regarding age, gender, education, marital status, work situation and religion. The majority of the sample was female (61%, N = 47) with male being the 35.1% (N = 27) of the sample. Age was ranging from 19 to 66 and mean age was 32.9 (SD = 11.7). Regarding education, 66.3% (N = 51) had a higher degree. A percentage of 32.2% (N = 25) were married, 32.2% (N = 25) were in a relationship and 35.1% (N = 27) were single. Christianity was the major religion (76.6%, N = 59) while 22.1% (N = 17) reported themselves as atheists. The mean level of religiousness of the sample was reported as 44.2% (*SD* = 31.8) (Table 1).

**Table 1**

*Sociodemographic characteristics of participants*

| Characteristics | % | n |
|---|---|---|
| Gender | | |
| Male | 35.1 | 27 |
| Female | 61.0 | 47 |
| Other | 3.9 | 3 |
| Age | | |
| 19-34 | 64.9 | 50 |
| 35-49 | 23.4 | 18 |
| 50-66 | 11.7 | 9 |

| | | |
|---|---|---|
| Education | 22.3 | 18 |
| Basic education | 10.4 | 8 |
| Vocational training | 36.4 | 28 |
| Bachelor | 29.9 | 28 |
| Master/ Doctorate/Diploma | 29.9 | 23 |
| | | |
| Work situation | | |
| Unemployed | 13 | 16.9 |
| Part-time | 14 | 18.2 |
| Full-time | 47 | 61.0 |
| Retired | 3 | 3.9 |
| | | |
| Marital status | | |
| Married | 32.5 | 25 |
| In a relationship | 32.5 | 25 |
| Single | 33.8 | 26 |
| Widowed | 1.3 | 1 |
| | | |
| Religion | | |
| Christianity | 59 | 76.6 |
| Atheism | 17 | 22.1 |
| Other | 1 | 1.3 |

*Note:* N = 77

## Instruments

### *Memory Recall of Moral Injury (MR-MI)*

The MR-MI is a self-report questionnaire that was developed for the purpose of this study. It consists of 22 items that assess participants' cognitions following a moral conflict that they have experienced. Participants are requested to describe the memory of a specific event and reply to questions on a scale from 1 (Totally disagree) to 7 (Totally agree) regarding their feelings during the event (e.g. "I felt guilt during the event"). Further questions relate to the

experienced moral conflict (e.g. “The sequence of events is clear in my memory”) and the participants’ understanding of their identity (e.g. “I feel that the person in this memory is different from the person I am today”). The higher the total score, the greatest the internal conflict. In the present study, internal consistency of the scale was a = 0.83. From this questionnaire only the two items measuring the feelings of guilt and shame after a moral event (e.g., “I was feeling guilt during the event.”, “I was feeling shame during the event.”) were used, since in the present study it was necessary to extract a single mean variable with the label “Moral emotions”.

*Moral Injury Appraisals Scale (MIAS*)

The MIAS (Hoffman et al., 2018) is a 9-item measure which assesses distress related to the appraisal of a moral violation. It contains five items assessing if participants are troubled by moral violations committed by others (e.g. “I am troubled by morally wrong things done by other people”) and four items assessing if participants are troubled by moral violations that they committed (e.g. “I am troubled because I did things that were morally wrong”). Responses are given in 4-point Likert type scale (Disagree-Agree). The MIAS total score is calculated by summing the raw scores of the three subscales and ranges from 9 to 45. Higher scores reflect more moral injury-related appraisals. In the present study Cronbach’s alpha of the scale was very good ($\alpha = 0.82$).

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*Sense of coherence scale (SOC-13)*

The Sense of Coherence (SOC) scale was developed from interviews with people who had recovered from adverse experiences (Antonovsky, 1987, 1993). SOC expresses “the extent to which a person has a pervasive, enduring, and dynamic feeling of confidence that the diversity of stimuli deriving from internal and external environments in the course of living is structured, predictable, explicable” This self-administered brief version consists of 13 seven-point Likert scale items that indicate the frequency with which the participant lives certain experiences (e.g., believing to be treated unfairly or having very confused feelings or ideas. Total scores range from 13 to 91. The higher the total score, the stronger the sense of coherence (Guo, 2018). In the present study, the Cronbach’s alpha of the entire instrument was 0.61. The internal consistency of its dimensions was: comprehensibility $\alpha = 0.60$, manageability $\alpha = 0.61$, meaningfulness $\alpha = 0.59$.

**Data analysis**

Data analysis was performed using IBM SPSS Statistics-Version 28. First of all, a variable was extracted from the total score of MIAS to measure moral distress. Moreover, from the data of the items “I was feeling guilt during the event.” and “I was feeling shame during the event.” of the MR-MI was created a single mean variable with the label “Moral emotions”. Level of religiousness was measured using the item “To which extent do consider yourself as religious?” of the demographics questionnaire. Additionally, besides the total SOC score, separate subscores were computed corresponding to the components of the SOC concept: comprehensibility (items: 2, 6, 8, 9, 11), manageability (items: 3, 5, 10, 13) and

meaningfulness (items: 1, 4, 7, 12). Response coding of items 1, 2, 3, 7, & 10 needed to be reversed.

The first hypothesis, namely the expected positive correlation between moral distress and guilt/shame (i.e. moral emotions) was tested via Pearson's analysis. Our hypothesis that the level of moral emotions is able to predict the level of moral distress was tested with Linear Regression. Linear Regression procedure was also used to test the hypothesis that religiousness and SOC are moderating or mediating the above association of moral emotions and moral distress. For Regression analysis, the procedure of PROCESS v.4.1 by Andrew F. Hayes (Igartua & Hayes, 2021) was operated. First, we ran the analysis for mediation of the religiousness and then we followed that same steps for the variable of SOC. The result of no association of SOC and religiousness with moral emotions leads us to exclude the mediation effect of SOC between moral emotions and moral distress. One of the prerequisites of mediation is the linear association of the predictor with the mediator, which is not the case in our data, neither for religiousness nor for SOC. Then, we ran two different moderation analyses setting religiousness and SOC as he moderators between moral emotions and moral distress. Also, after creating a grouping variable for extreme atheists (22.1%, N = 17) and extreme religious (29.9%, N = 23) (using (0 and 100 on religiousness, respectively) an Independent sample t-test was conducted for testing their mean differences on comprehensibility, manageability and meaningfulness.

## Results

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The mean scores of the moral emotions, MIAS and SOC and religiousness were 8.46 (*SD* = 4.13), 24.54 (*SD* = 8.97), 24.63 (*SD* = 5.02), and 55.32 (*SD* = 10.03), respectively. In addition, the minimum, maximum and mean score of each scale and their subscales are shown in Table 2.

**Table 2**

*Descriptives*

| | Minimum | Maximum | Mean | *SD* |
|---|---|---|---|---|
| Moral Emotions (Guilt/Shame) | 2 | 14 | 8.46 | 4.13 |
| MIAS | 9 | 36 | 24.63 | 5.02 |
| SOC TOTAL | 31 | 78 | 55.32 | 10.03 |
| Comprehensibility | 11 | 35 | 22.50 | 5.63 |
| Manageability | 9 | 28 | 17.12 | 3.93 |
| Meaningfulness | 10 | 24 | 15,68 | 3.23 |
| Religiousness | 0 | 100 | 44.28 | 31.80 |

*Note.* N = 77

The results of the Pearson's correlation analyses indicated that: there was a positive correlation between moral emotions and moral distress ($r = .28$, $p < .01$), and there was also

a negative correlation between the total score of SOC and moral distress (r = -.28, $p < .01$. Subscales of comprehensibility (r = -.30, $p < .00$) and manageability were negatively correlated with moral distress (r = -.25, $p < .02$). Religiousness and meaningfulness were not significantly correlated with any of the other variables (Table 3). In linear regression analyses, significant associations were found, as well, between moral emotions and moral distress ($B = 0.69$, $p < .001$). Results showed that moral emotions explain 27.6% of the variance of moral distress (Table 4).

**Table 3**

*Pearson's Correlation coefficients between moral emotions, moral distress, religiousness and SOC*

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1. Moral emotions | - | | | | | | |
| 2. Moral distress | .276** | - | | | | | |
| 3. Religiousness | | | - | | | | |
| 4. SOC TOTAL | | -.280** | | - | | | |
| 5. Comprehensibility | | -.306** | | .895** | - | | |
| 6. Manageability | | -.257** | | .746** | .512** | - | |
| 7. Meaningfulness | | | | .632** | .408** | | - |

*Note.* **. Correlation is significant at the 0.01 level (2-tailed), N = 77

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**Table 4**

*Regression results using moral distress as the criterion*

| Predictor | B | B 95% CI (LL,UL) | beta | $sr^2$ | r | $R^2$ |
|---|---|---|---|---|---|---|
| (Intercept) | 21.79** | [19.26,24.32] | | | | |
| Moral emotions | .33** | [.06,.60] | .27 | .06 | .13** | .276 |

*Note.* A significant B-weight indicates the beta-weight and semi-partial correlation are also significant. B represents unstandardized regression weights. beta indicates the standardized regression weights. $sr^2$ represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively.
** indicates $p < .01$

To investigate whether SOC acts as a moderator between moral emotions and moral distress (Fig. 2) a moderation analysis was performed using PROCESS. The outcome variable for analysis was moral distress, the predictor variable for the analysis was moral emotions and the moderator variable was SOC. As presented in Table 5, the interaction between moral emotions and SOC was found to be statistically significant ($B$ = -.039, 95% *C.I.* [-.065, -.013], $p < .05$). Specifically, when SOC is low, there is a significant positive relationship between moral emotions and moral distress ($b$ = .759, 95% *CI* [0.359, 1.159], $t$ = 3.781, $p <$ .000). At the mean value of SOC, there is a significant positive relationship between moral emotions and moral distress ($b$ = 0.359, 95% *CI* [0.101, 0.617, $t$ = 2.778, $p <$ .000). When SOC is high, there is a non-significant positive relationship between moral emotions and moral distress ($b$ = 0.397, 95% *CI* [-0.368, 0.289], $t$ = -.241, $p$ = .811). Mediation analysis's

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results for SOC were non-significant. Statistical analyses results for religiousness as the moderator and mediator between moral emotions and moral distress were non-significant. And, also, we did not extract significant mean differences of extreme atheists and extreme religious on comprehensibility, manageability and meaningfulness.

**Figure 3**

*Schematic representation of moderation*

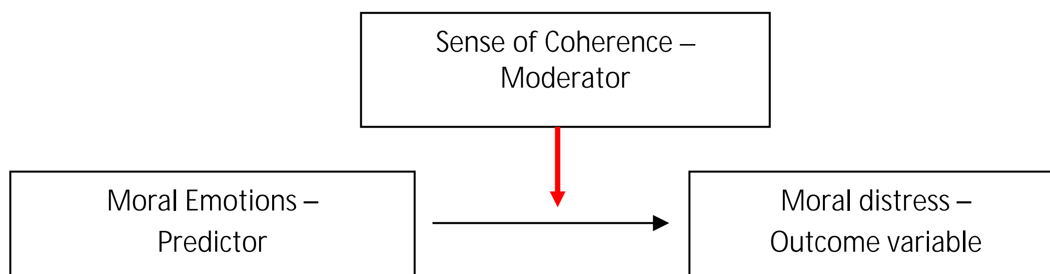


**Table 5**

*Moderation analysis results using moral distress as the criterion*

| Effect | *B* | *SE* | *t* | *p* | 95% *CI* (LL,UL) |
|---|---|---|---|---|---|
| (Constant) | 24.337 | .552 | 46.615 | .000 | 23.29, 25.377 |
| Moral emotions | .359 | .129 | 2.778 | .006 | .101, .617 |
| SOC | -.132 | .052 | -2.529 | .013 | -.237, -.028 |
| Moral emotions x SOC | -.039 | .013 | -3.064 | .003 | -.065, -.013 |

*Note*. *N* = 77; CI = confidence interval; LL = lower limit; UL = upper limit.

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## Discussion

The main purpose of this study is to examine moral distress and its relation with guilt and shame in the normal population. Moreover, an attempt was made to investigate the moderating or mediating factor of religiousness and sense of coherence in the above association.

Descriptive analysis showed that the majority of the sample was females (61%), 19-34 years old (64.9%). Also, even 76.6% of the sample defines themselves as Christians, the mean level of religiousness was reported as 44.2%. An explanation that could be suggested for this difference is that orthodox Christianity is an important part of Greek culture. People become baptized since an early age, and they grow up with the perception that Christianity is a component of their Greek identity. This does not necessarily mean that they consider themselves religious.

The results of this research indicate that both moral emotions and moral distress of the whole sample exceed the average. Actually, the mean total score of MIAS of the sample ($M$ = 24.63) was notably less than the total score of a Japanese study ($M$ = 31.76) (Daisuke et al., 2021). The comparison of our results with the study of Daisuke et al. (2021) is interesting because of the fact that it was the only study on a general population, which was found, while conducting our literature review. The difference might be attributed due to either cultural differences or small sample size. Above the average were also standing the results of total sense of coherence. Even though, mean religiousness was in a medium level, its standard

deviation was found to be great (*SD* = 31.8). It is possible that the extreme responding has distorted the validity and reliability of the variable and its associations with the other variables. This assumption may be confirmed from the results of Normality tests, which were conducted and showed that p- values for moral emotions ($p < .001$) and religiousness ($p = .003$) was small enough, so we accept the alternative hypothesis that the data are not sampled from a normal population.

Our first hypothesis is confirmed. Moral emotions are positively correlated with moral distress. This finding means that the greater the moral emotions after a potentially morally injurious situation, the greater the moral distress. Further analysis indicated that moral distress can successfully be predicted by moral emotions. Namely, about 27.6% of the variance of moral distress is explained by moral emotions. These results were consistent with previous studies (Marx et al., 2010). Guilt and shame may be critical to the development and/or maintenance of trauma and PTSD, as they are capable to impede the emotional processing of fear (Ehlers & Steil, 1995; Vermetten & Jetly, 2018). Additionally, moral emotions may also impede successful integration of the traumatic experiences with prior beliefs by leading to maintenance of the PTSD symptomatology due to the excessive usage of coping strategies (Street et al., 2005; Vermetten & Jetly, 2018).

Additionally, -even though no association was found with moral emotions- as expected, SOC is negatively correlated with moral distress. The interpretation is that the greater one's SOC is, the less its moral distress after exposure to a potentially morally injurious event. The same rule applies to the subscales of comprehensibility and manageability, but, interestingly, not for meaningfulness.

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The result of no association of SOC and religiousness with moral emotions leads us to exclude the mediation effect of SOC between moral emotions and moral distress. Therefore, we ran a moderation analysis which resulted in statistically significant results. Particularly, it was found that the relationship between moral emotions and moral distress only really emerges in people with low or average levels of SOC. Yet, the findings from mediation and moderation analyses indicate that SOC is one -but not the only- influential factor behind the relation of moral emotions and moral distress. Thus, our second hypothesis is partly true and in line with a large meta-analysis, which reveals an essential association between SOC and post-traumatic symptom severity: higher SOC levels are correlated with lower symptom severity (Schäfer et al., 2019). Rohani et al. (2015) found religious coping is less significant as a predictor for quality of life changes than the degree of SOC. Several studies have shown that SOC is a protective quality of self against mental and physical illness (Boynton, 2016). Resilience in aversive situations depends on the individual's SOC, which is, namely, its global orientation to life based on self-confidence regarding challenges (Antonovsky, 1987). In particular, Antonovsky (1987) describes that viewing a negative experience as controllable, manageable and meaningful, an individual will have less negative psychological impact and will experience less shame, as a result of this experience.

Our last hypothesis, that religiousness moderates the relationship between moral emotions and moral distress was not confirmed. In fact, whereas past researchers have found that the more disconnected one feels from God, the more shame and guilt he experiences (Murray & Ciarrocchi, 2007), the present study has shown that religiousness is not correlated with any of the above variables. Postolică et al. (2018) found that religiosity is positively related with

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SOC in young people. The explanation for this finding is that older people posses more resistant resources due to the longer experience in life than young people, who are yet “unprepared” to experience distressing life situations.

This might be explained by the fact that standard deviation of the sample was found to be very high. The extremity on the responses, which is also an interesting result considering the different generations of the whole sample did not avail the statistical analyses of this study. However, it is a topic that it would be interesting for further investigation.

Besides fairly small size sample, which increases the possibility for type 2 errors (false negatives; failing to detect an impact that actually does exist), simple random sampling decreases the probability of collecting a sample that adequately represent the full population. Moreover, cross-sectional study is not the appropriate design for this survey, as the symptom severity of the described morally injurious event may have faded with the passage of time. Another limitation could be considered the fact that Covid-19 has influenced sample’s sense of coherence; especially for their perception that everything is predictable and manageable (Tanaka et al., 2021).

To our knowledge, this is the first attempt to assess moral distress in the normal population, as the existing literature is mostly focused on healthcare and public safety personnel. Another important strength of the present study is that our finding of the moderating role of sense of coherence between moral emotions and moral distress may be fruitful for constructing avenues for therapeutic interventions. This study confirms the necessity of establishing intrapersonal stabilization before treating post-traumatic stress. Assessing available generalized resistant resources, modifying rigid, global thoughts and strengthening the sense

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of coherence may precede directly dealing with trauma per se. Further investigation is suggested on testing the efficacy of strengthening SOC before the implementation of post-traumatic interventions. Finally, it would, also, be interesting to investigate the role of religiousness between moral emotions and moral injury.

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