

Palliative care professionals' inner life: Exploring the mediating role of self-compassion in the prediction of compassion satisfaction, compassion fatigue, burnout and wellbeing

Laura Galiana¹, Noemí Sansó^{2,3}, Inmaculada Muñoz-Martínez⁴, Gabriel Vidal-Blanco⁵,
Amparo Oliver¹, Philip J Larkin⁶

Filiations:

1. Department of Methodology for the Behavioral Sciences, University of Valencia, Spain.
2. Department of Nursing and Physiotherapy, University of Balearic Islands, Palma, Spain
3. Balearic Islands Health Research Institute (IDISBA), 07120 Palma, Spain
4. Hospital Virgen de la Salud, Toledo, Spain.
5. Department of Nursing, University of Valencia, Valencia, Spain.
6. Chair of Palliative Care Nursing. Palliative and Supportive Care Service. Lausanne University Hospital and University of Lausanne, Switzerland.

Corresponding author: Noemí Sansó noemi.sanso@uib.es Tel. +34 971172366.
Valldemossa Road, Km 7,5. 07122. Palma. Balearic Islands, SPAIN.

Running Title: Palliative care professionals' inner life

Abstract

Context. Palliative care professionals are exposed to suffering on a daily basis. Working in such an environment frequently raises existential issues, psychological challenges, and emotional distress, that can detract from compassionate care. Identifying factors that help professionals cope with frequent exposure to issues related to mortality, such as compassion, could enhance palliative care providers' and patients' quality of life and wellbeing.

Objectives. To improve our understanding of the factors associated with professionals' inner life studying the role of self-compassion as a mediating variable between self-care and awareness and professionals' quality of life, and quantifying the impact of compassionate care.

Methods. A cross-sectional online survey of palliative care professionals was conducted through the Spanish Society of Palliative Care. 296 professionals answered the survey.

Results. The model tested showed an adequate fit ($\chi^2(212) = 476.688$ ($p < .001$), CFI = .907, RMSEA = .066 [.058,.073], and SRMR = .068), and the hypotheses were supported. Self-care and awareness predicted coping with death and self-compassion, which in turn predicted professional quality of life. Self-compassion had the greatest predictive power. Professional quality of life showed a statistically significant and positive effect on personal wellbeing, explaining more than 50% of its variance ($R^2 = .574$; $p < .001$).

Conclusion. For palliative care professionals, the cultivation of self-compassion is equally needed as compassion for others. Professional quality of life and compassionate care are related to professionals' wellbeing: when professionals take care of themselves, this will lead in a more compassionate care, but also in healthier, happier professionals.

Key words: palliative care professionals; self-compassion; self-care; awareness; professional quality of life; wellbeing.

Introduction

As a caring philosophy, person-centered care holds that there is no appropriate healthcare unless it is compassionate (1). Compassion has been defined as “a virtuous response that seeks to address the suffering and needs of a person through relational understanding and action” (2). Specifically, when caring for the dying, compassionate qualities, are essential, not only for the patients’ wellbeing, but also for professionals (3,4). However, there is currently a great concern that these compassionate qualities are not always present (2, 5, 6), a fact that has been strongly accentuated by the current health crisis (7, 8, 9). Difficulty in compassionate care has been related to the several stressors which affect palliative care (PC) professionals, including increasing workload, communication difficulties, inadequate time to deal with patients, inadequate coping with their own emotional response to grieving, exposure to death, depression, or guilt (10,11). Compassion is also linked to protective factors, such as self-care (12-15), empathy (16), awareness (17-22), or competency and attitudes towards death (23).

Among these, self-compassion has been pointed as essential for providing compassionate care and maintaining healthcare workers balance (24). Indeed, compassion can be oriented or directed along three different paths: we can experience feelings of compassion for others, from others, and for ourselves (25-29). Self-compassion has been related to a more adaptive psychological profile, with lower levels of rumination (30-32), avoidance (33), better emotional validation skills (34,35), and greater wisdom, emotional intelligence, life satisfaction, and well-being (36,37). In the healthcare arena, self-compassionate healthcare professional can build resilience against stress and burnout (38), and self-compassion has been associated to professional quality of life (39- 41).

In the context of PC, compassion is certainly essential for patients, but also for clinicians’ wellbeing (42-44). Although Kearney et al. (10) had already pointed to a close relation between neglecting self-care, a lack of compassion toward themselves and others, and experiencing burnout and compassion fatigue, this has not been yet supported with evidence. In fact, very little research has investigated either compassion or self-compassion in the PC professionals (45,46). Addressing literature on compassion protectors, Sansó et al. (47) tested a mapping model with variables involved in PC professionals’ quality of life: compassion satisfaction (CS), compassion fatigue (CF), and burnout (BO). BO is a syndrome that can be experienced by human services employees

in stressful situations (48). Healthcare professionals are especially vulnerable, because their work context is characterized by high-risk decisions, dealing with the public, and expectations of compassion and sensitivity (49-51). CF is defined as secondary traumatic stress experienced by providers after witnessing patients' suffering (52-54). Exhaustion from dealing with other people's suffering leads to a decreased capacity for compassion among professionals (55,56). CF can lead to the development of psychological difficulties (57), physical and emotional exhaustion, an inability to provide compassion (58), and the reduction of bearing in the suffering of others (55). Finally, CS is the emotional fulfilment derived from providing care to others (59) and the joy that comes from helping others (60). Professionals may experience CS when feeling that their work has a social value (61). These dimensions, widely studied by Charles R. Figley and Beth H. Stamm, facilitate the understanding of some aspects of the therapeutic relationship in the presence of suffering, in particular, variables found to protect this relationship were self-care, awareness, and coping with death competence (47).

This study builds upon earlier research by Sansó et al. (47), which has recently been tested internationally (62), and offers a broader picture of PC professionals' inner lives, understood in terms of maintaining equanimity, cultivating compassion and developing a deeper sense of vocation and workplace satisfaction (47), by making two new contributions. Firstly, we study the role of self-compassion as a mediator between self-care and awareness and professionals' quality of life. We hypothesized that professionals taking better care of themselves, and being conscious and aware, will show higher levels of compassion for themselves, which in turn will lead to higher levels of compassionate care, higher levels of CS and lower levels of CF and BO. Secondly, we aim to quantify the impact of compassionate care, including CS, CF, and BO, on professionals' personal wellbeing.

Methods

Study design

A cross-sectional survey of Spanish PC professionals was conducted to assess variables influencing professionals' compassionate care. This cross-sectional study has been reported using the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Statement (63).

Setting and Participants

The survey was conducted from February to March 2020. Professionals were contacted through the Spanish Society of Palliative Care (SECPAL). Participants were sampled from the SECPAL member lists and invited to complete an online survey using SurveyMonkey. Participation was voluntary and required respondents' informed consent. A total of 338 PC professionals included in the SECPAL Directory (available at <https://secpal.com/directorio-1>) were contacted by email on two occasions (February 8th and March 9th, 2020). Professionals were asked to share and publicize the survey among their co-workers.

In order to be included, participants had to be healthcare professionals (physicians, nurses, psychologists, nursing assistants, social workers, or other) currently providing care to end-of-life patients, although not necessarily in PC settings. No a priori sample size estimation was calculated.

Measures

Data were collected using the following measures:

- a) The Professional Self-Care Scale (PSCS; 64), composed by nine items and assesses three dimensions of professionals' self-care: physical, inner and social. This scale was originally developed and validated in Spanish. Items score in a 5-point Likert scale, ranging from 1 (totally disagree) to 5 (totally agree). The score on each dimension is calculated with the sum of the scores for the three items, divided by three. This scale does not offer cut-off points for score interpretation. However, taking into account the response scale, scores close to 1 would mean very low levels of self-care (either physical, inner, or social self-care); scores close to 2 would mean low levels of self-care; scores close to 3 would mean medium levels of self-care; scores close to 4 would mean high levels of self-care; and scores close to 5 would mean very high levels of self-care.
- b) Five indicators of the validated Spanish version of the Mindful Attention Awareness Scale (65), an instrument measuring the tendency to be aware and conscious of one's own experiences of daily life. Items included were 7, 8, 9, 10, and 14, following recommendations from Galiana et al. (66). The reduced version showed adequate internal structure ($\chi^2(5) = 43.208$ ($p < .001$), CFI = .982, and SRMR = .026). The awareness score was calculated using the sum of the reversed

- scores for the five items divided by five. Scores close to 1 represent very low levels of awareness; scores close to 2 represent low levels of awareness; scores close to 3 represent medium levels of awareness; scores close to 4 represent high levels of awareness; and scores close to 5 represent very high levels of awareness.
- c) The Coping with Death Scale, in its Spanish Short Version (CDS-S;67) which measures professionals' competence in handling death and their knowledge concerning preparedness for death. The measure comprises 9 items using a 5-point Likert type scale, from 1 'totally disagree' to 5 'totally agree'. The coping with death score was calculated with the sum of the scores in the nine items, divided by nine. Scores close to 1 represent a very poor ability to cope with death; scores close to 2 represent a poor ability to cope with death; scores close to 3 represent a moderate ability to cope with death; scores close to 4 represent a strong ability to cope with death; and scores close to 5 represent a very strong ability to cope with death.
- d) The Self-Compassion Scale – Short Form (SCS; 68). We used the Spanish version (69). The SCS is formed by 12 items assessing three main components of self-compassion and their opposites: self-kindness/self-judgment, common humanity/isolation, and mindfulness/over-identification. Items score in a 5-point Likert-type scale, from 1 'almost never' to 5 'almost always'. Through these dimensions, two general factors of overall self-compassion can be measured: positive and negative self-compassion. The positive self-compassion score is calculated using the mean for the items relating to self-kindness (items 2 and 6), mindfulness (3 and 7), and common humanity (5 and 10). The negative self-compassion score is calculated using the mean for the items relating to over-identification (1 and 9), isolation (4 and 8), and self-judgment (11 and 12). Scores close to 1 represent very low levels of self-compassion (either positive or negative); scores close to 2 represent low levels of self-compassion; scores close to 3 represent medium levels of self-compassion; scores close to 4 represent high levels of self-compassion; and scores close to 5 represent very high levels of self-compassion.
- e) Version 5 of the Professional Quality of Life Scale (ProQOL) was used, in its Spanish validation (70). The ProQOL comprises three subscales: CS, CF, and BO (54). Each dimension is represented in the scale by 10 items and scored by the use of a 5-point Likert scale (from 1 'never' to 5 'very often'). Scores of each

dimension are calculated with the sum of the 10 items, and therefore range from 10 to 50. Scores equal to or below 22 represent low levels of CS, CF or BO; scores between 23 and 41 represent medium levels of CS, CF or BO; and scores equal to or above 42 represent high levels of CS, CF or BO (54).

- f) The Spanish version of the Personal Wellbeing Index (4). The scale measures personal well-being with eight items, ranging from 1 (very dissatisfied) to 5 (very satisfied). The total score of wellbeing is calculated with the sum of the scores in the eight items, divided by eight. This scale does not offer cut-off points for score interpretation. Scores close to 1 represent very low levels of wellbeing; scores close to 2 represent low levels of wellbeing; scores close to 3 represent medium levels of wellbeing; scores close to 4 represent high levels of wellbeing; and scores close to 5 represent very high levels of wellbeing.

Additionally, control variables were also measured, including sex, age, profession, an indicator of work overload (“*I have an excessive workload*”), ranging from 1 (never) to 4 (almost always), and an indicator of workload control (“*I have control over my workload*”), with the same response scale.

Data analysis

Statistical analyses included descriptive statistics, estimations of reliability and correlations among variables under study, and a full structural equation model (SEM). SEM presents three major advantages compared to traditional multivariate techniques: (1) explicit assessment of measurement error; (2) estimation of unobserved (latent) variables via observed variables; and (3) model testing where an a priori structure can be imposed and assessed (71).

We hypothesized, refined and tested a SEM in which the three dimensions of self-care, i.e. physical, psychological, and social self-care, together with awareness, predicted self-compassion (positive and negative) and ability to cope with death, while self-compassion and ability to cope with death predicted professional quality of life and professional quality of life predicted personal wellbeing among PC professionals. The effects of age, sex, work overload and workload control were controlled for all variables.

To assess the model fit, we used: the chi-square, the Comparative Fit Index (CFI), the Standardized Root Mean Square Residual (SRMR), and the Root Mean Square Error of Approximation (RMSEA), with the following cut-off criteria to determine good fit:

CFI above .90 (better more than .95) and SRMR or RMSEA below .08 (better below .05) (72). However, RMSEA has shown poor performances in structural models with low degrees of freedom and in samples with small sizes (73). The model was estimated using maximum likelihood with robust corrections for the standard errors and fit indices, the recommended procedure for ordinal and non-normal data. SPSS version 24 (74) and MPLUS version 8.4 (75) were used.

Ethical considerations

The study was approved by the Research Ethics Committee at the University of the Balearic Islands (115CER19).

Results

296 professionals completed the survey, with an estimated response rate of 87.57%. This is only an estimate, as we asked professionals to publicize the survey themselves. Several rules-of-thumb were followed, including a minimum sample size of 200 (76,77) and 10 cases per variable (78). As a result, our sample size ($n = 296$) meets the criteria established by both Boomsma ($n > 200$) and Nunnally ($n > 270$ [10 cases per 27 variables]).

Mean age was 43.9 years old ($SD = 10.15$); 77.40% were women. Regarding professions, 44.2% nurses, 31.8% physicians, 8.6% psychologists, 4.5% nursing assistants, 5.8% social workers, and 5.1% had other professions. Most of the participants were married (64.9%). Details of sample characteristics can be consulted in Table 1.

INSERT TABLE 1 HERE

Reliability estimates and descriptive statistics are provided in Table 2. Participants showed medium levels of psychological self-care (mean = 3.72), and medium-high levels of physical and social self-care (mean = 3.72 and mean = 4.13, respectively). As regards awareness and coping with death, levels were also medium-high (mean = 4.00 and mean = 4.05, in a scale ranging from 1 to 5). Levels of both positive and negative self-compassion were medium, with higher scores in positive self-compassion. Specifically, the dimension of mindfulness showed the highest mean (mean = 3.70), whereas the dimension of isolation presented the lowest one (mean = 2.62). As regards professional quality of life, levels were high for CS (mean > 42), low for compassion fatigue (mean <

22), and medium for BO (mean > 23). Finally, levels of wellbeing were medium-high (mean = 3.95, in a scale ranging from 1 to 5).

INSERT TABLE 2 HERE

Correlations among variables largely followed the hypothesis, with self-care, awareness, coping with death, positive self-compassion (and its dimensions), CS, and wellbeing showing positive and statistically significant relations. These variables showed negative relations with negative self-compassion (and its dimensions), compassion fatigue, and BO; which in turn were positively related between them.

INSERT TABLE 3 HERE

The hypothesized model is presented in Figure 1. The mediating variables, that is, self-compassion (positive and negative), ability to cope with death, and professional quality of life, were modeled as latent factors (circles), free of measurement error. Given the sample size and complexity of the model, the rest of the variables were included as observed variables (squares).

INSERT FIGURE 1 HERE

The hypothesized model adequately fitted the data: $\chi^2(272) = 549.787$ ($p < .001$), CFI = .907, RMSEA = .059 [.052,.067], and SRMR = .083. The CFI was above .90 and the RMSEA below .08, which have been described as adequate fit values in the literature (72).

With regard to measurement, factor loadings were adequate for the four latent factors (circles), meaning that these factors adequately explained their various subdimensions (i.e. the latent factor ‘positive self-compassion’ adequately explained the three observed variables: self-kindness, mindfulness, and common humanity) (see Table 4). These loadings highlight the adequate internal structure of the scales and the key dimensions in each of the study factors, with self-kindness being the most important in the definition of the factor ‘positive self-compassion’, and isolation being the most important in the case of negative self-compassion. When it came to professional quality of life, compassion fatigue was the most important component in the factor definition.

INSERT TABLE 4 HERE

Regarding the control variables, which included sex, age, work overload, and workload control, their relations to the different variables implied in professionals’ inner

life are displayed in Table 5. Control variables were included because they could influence the study's main outcomes despite not being the primary focus. Profession was not included in the model, as analyses of variance showed no statistically significant differences due to the effects of profession on physical self-care ($F(3,244) = 0.412$; $p = .744$; $\eta^2 = .005$), psychological self-care ($F(3,244) = 1.874$; $p = .134$; $\eta^2 = .023$), social self-care ($F(3,244) = 2.453$; $p = .064$; $\eta^2 = .029$), mindfulness ($F(3,245) = 2.184$; $p = .091$; $\eta^2 = .026$), positive self-compassion ($F(3,268) = 1.574$; $p = .195$; $\eta^2 = .015$), negative self-compassion ($F(3,268) = 1.979$; $p = .117$; $\eta^2 = .022$), and well-being ($F(3,238) = 1.102$; $p = .349$; $\eta^2 = .014$). The only statistically significant effect of profession was on ability to cope with death ($F(3,241) = 2.668$; $p = .048$; $\eta^2 = .032$), but post-hoc comparisons showed no statistically significant effects between subgroups of professions. Additionally, a multivariate analysis of variance was performed to study the effects of profession on professional quality of life, showing no statistically significant effects ($F(9,783) = 1.473$; $p = .153$; $\eta^2 = .017$).

As shown in Table 5, sex had a negative statistically significant effect on psychological self-care, meaning women showed higher levels of this variable; and positive effects on positive self-compassion and coping with death, meaning men showed higher levels of these facilitators of compassionate care. Age, in turn, showed positive relations with psychological self-care and awareness. Therefore, older palliative care professionals showed higher levels of psychological self-care and awareness. Work overload was only related with professional quality of life. This relation was negative, therefore meaning professionals with higher work volume showed lower levels of professional quality of life. Finally, workload control was positively related to the three dimensions of self-care, to awareness, and also to professional quality of life. Professionals with workload control showed, therefore, greater levels of self-care, awareness and professional quality of life.

INSERT TABLE 5 HERE

With respect to the relationships between variables relating to inner life, the model pointed the power of self-care and awareness to predict both self-compassion and coping with death. Specifically, positive and negative self-compassion were predicted by psychological self-care, social self-care and awareness, with positive relationships with positive self-compassion, and negative ones with negative self-compassion. More than 60% of positive self-compassion was explained ($R^2 = .621$; $p < .001$), and almost 40% of

negative self-compassion ($R^2 = .388$; $p < .001$). More than one quarter of the variance of coping with death was explained by psychological self-care and awareness ($R^2 = .279$; $p < .001$), being the psychological or inner care the variable with higher predictive power.

As regards the prediction of professional quality of life, negative self-compassion showed the greatest predictive power. Positive self-compassion and coping with death, although being significant predictors, showed lower impact. Overall, almost 80% of professional quality of life was explained ($R^2 = .780$; $p < .001$).

Finally, professional quality of life showed a statistically significant and positive effect on personal wellbeing, explaining more than 50% of its variance ($R^2 = .578$; $p < .001$).

INSERT FIGURE 2 HERE

Discussion

Our aim was to investigate the extent to which data from a nationwide survey of Spanish PC professionals supported Kearney and Weininger's model (79) on the relationships among awareness, self-care, CS, CF, BO, and coping with death, by making two essential contributions to Sansó et al. (47) work: first, to study the role of self-compassion as a mediator between self-care and awareness and professionals' quality of life; and second, quantifying the impact of compassionate care, including CS, CF, and BO, on professionals' personal wellbeing.

We would like to start by discussing the role of control variables. Even though our aim was not to study the role of sex, age or workload on the compassionate care of palliative care professionals, some interesting results arose. Specifically, we found that women practiced greater psychological self-care; in the case of men, a greater coping competence in the face of death and a better level of self-compassion was observed. Regarding age, older people obtained better scores in awareness and psychological self-care. In a previous study carried out on the same population (47), age was also related to self-care, but specifically to the social dimension. In relation to the work overload, it influenced the level of professional quality of life, as expected, obtaining worse results as the volume of workload increased. These results are consistent with those obtained in a study conducted with volunteers in Palliative Care units (80). In the case of workload

control, results pointed that the greater control, the better self-care, awareness and professional quality of life. Several studies that have also observed a relationship between workload control and burnout (a dimension of professional quality of life) (81,82). However, research on work variables and compassion fatigue and satisfaction is scarce, and it is even more difficult to find studies that study their relation to variables such as self-care or awareness. This is an important input of our study. As far as we know, it is the first one to test the relations between the variables implied in compassionate care and demonstrate their association despite of, or even with, the effect of sociodemographic or work variables.

The results regarding the part of the model already tested in the work of Sansó et al. (47) were very similar. For example, in this study, the effect of the level of awareness on professional quality of life was confirmed, echoing previous research (47,83). The impact of self-care on coping with death was also found in current research, as already identified (47). Additionally, in this study the effect of self-care on self-compassion, both positive and negative, was also found. Specifically, inner and social self-care were positively related to positive self-compassion, and negatively to its negative dimension, coinciding with previous research (46). The practice of self-care, defined in the literature as the promotion of health (84) and the process of maintaining one's wholeness (85), has been found to be important in coping with occupational stressors in general healthcare professionals (86,87), and seems to be even more so in the PC context, where the high stress and emotionally charged environment, makes self-care an imperative rather than a choice. This work deepens and extends this philosophical perspective (47, 79, 84): PC professionals experience suffering, as do their patients and families, and self-care is an important tool to overcome it.

Along the same line, the effect of awareness on coping with death was almost identical to that found by Sansó et al. (47), and the effects on self-compassion were as expected, with these variables being closely related. This result is not surprising, since there are various studies that have shown that increasing levels of self-awareness through interventions also affect levels of self-compassion (39,41). Awareness, then, and consistently with Kearney and Weininger's model (79), allows professionals to simultaneously attending to and monitoring patients' and their own needs. It has to be borne in mind that awareness plays an essential role in countertransference issues that may arise in emotional responses when providing end-of-life care (88), and therefore, it

could promote the expression of thoughts and feelings (89), denoting greater feelings of kindness and equanimity both for patients and for themselves.

As regards the prediction of professional quality of life, the study by Sansó et al. (47) demonstrated that the impact of coping with death on its three dimensions was around .30. In this study, this impact dropped to .21. The relationship between self-compassion and professional quality of life was greater, specifically regarding its negative dimension, and it is possibly the fact of introducing this construct that decreases the predictive capacity of coping with death. Thus, although having competencies in coping with death is important, the key in predicting the professional quality of life seems to be the capacity to be compassionate towards oneself, by avoiding behaviors such as deny oneself empathy, feel isolated and cut off from others when considering one's own struggles and failures, and get caught up and swept away by one's aversive reactions. More evidence in the sense of this hypothesis is reflected in the predictive capacity of the model, since while the model of Sansó et al. (47) explained between 20 and 30% of the dimensions of professional quality of life, when self-compassion is evaluated and added to the model, the predictive capacity doubles. Therefore, our results provide evidence that, for PC professionals, the cultivation of compassion for oneself is equally needed as compassion for others (42). This is not only beneficial for the patient, but also for the professional (43, 90), as it will lead to a more compassionate care. Indeed, Kearney et al. (79) suggested that those neglecting compassion towards themselves and others would experience greater levels of BO and compassion fatigue, as seen in our results. Therefore, self-compassion, understood as giving oneself care and concern when facing experiences of suffering (29), is a helpful resource for end of life professionals, not only because of its importance in maintaining adequate mental health, but also because of its association with compassion for others (39,91,92). Appropriate levels of self-compassion will alleviate our professionals from BO and secondary trauma, which have been repeatedly identified as disablers of compassion in end-of-life care professionals, and consequently, will enhance our professionals' capacity for compassionate care (92).

The last part of the model, referring to the second novel contribution of this research, has to do with the relationship between the professional quality of life and personal wellbeing. Our results demonstrate a close relationship of these variables, with compassionate care for oneself and adequate levels of professional quality of life enhancing wellbeing for PC professionals. Recently, Sansó et al. (3) have pointed the

predictive capacity of the professional quality of life on wellbeing in nurses, in the same way that Koh et al. (93) and Lizano (94) had already done. Healthcare professionals' wellbeing, beyond its relationships with variables such as medical errors, sick leaves and absenteeism (95), or better quality of care (96), should be a primary objective *per se* of any health system. The fact that such a close relationship has been found makes us believe in the need to promote professional self-care, as this will lead in a more compassionate care, but also in healthier, happier professionals.

Overall, we have successfully tested Kearney and Weininger's model of self-care (79), by extending Sansó et al. (47) work in three key ways. Firstly, we give a leading role to self-compassion in the model, which acts as a consequence of professionals' practice of self-care and self-awareness, but also as an essential protector against BO and compassion fatigue. Palliative professionals are continuously finding ways of both using themselves as a healing presence to patients in life-threatening crises, while coping with frequent losses (97). As pointed by Sansó et al. (47), they are "a powerful but vulnerable tool in the caring process" (p. 204). To avoid this vulnerability, the cultivation of inner life through self-care, awareness and compassion has proven to be an adequate answer, allowing them to continue to deliver compassionate care. Secondly, such compassionate care and adequate levels of professional quality of life are clearly related to professionals' personal wellbeing. Whereas previous literature is unequivocal in its focus on the importance of inner life for compassionate care, evidence of professionals' wellbeing is scant so far. It is not only important to take care of patients' needs, but also those of professionals' being of great importance to ensure optimal wellbeing in PC professionals. Kearney and Weininger's awareness based theoretical model of self-care (79) seems to offer a strong model for such support. And, finally, these inputs –the cultivation of inner life for better professional quality of life and compassionate care, and its repercussion on professionals' wellbeing–, take place across sex, age, and controlling for important work variables, such as work overload or workload control. In fact, when compared to these traditional organizational variables, self-compassion and coping with death have stronger effects on professional quality of life, which emphasizes the importance of properly cultivating an inner life in healthcare professionals to provide compassionate care.

This work has several limitations, such as the sample size, although it met the requirements for this type of design (98). Another limitation is that the model did not include variables that may impact professionals' inner lives, such as clinical experience,

number of deaths, or time spent caring for dying patients, as this information was not recorded in the survey. Finally, another shortcoming is the cross-sectional nature of the study. Difficulties in establishing paths in data collected at a single time point are well known, but also hard to overcome. Future studies with a longitudinal design will enable to test for causal links among these complex pieces of the professionals' inner life. In this same line, forthcoming studies including qualitative information on the coping strategies that professionals use to overcome grief and suffering will also shed light on the paths towards better compassionate care.

Competing Interest

The authors declare no conflict of interests.

Funding

This research was funded by Project RTI2018-094089-I00: Longitudinal study of compassion and other Professional Quality of Life determinants: A national level research on palliative care professionals (CompPal)[Estudio longitudinal de la compasión y otros determinantes de la calidad de vida profesional: Una investigación en profesionales de cuidados paliativos a nivel nacional (Comp Pal)] (Ministerio de Ciencia e Innovación \ Agencia Estatal de Investigación / FEDER).

Disclosures and Acknowledgments

The authors thank the Spanish Society of Palliative Care and palliative care professionals for their support in this research. The authors declare no conflict of interests.

References

1. Singer T, Bolz M. Compassion: Bridging practice and science. Max Planck Institute for Human Cognitive and Brain Sciences, 2013. Available online at: <http://www.compassion-training.org/>
2. Sinclair S, McClement S, Raffin-Bouchal S, Hack TF, Hagen NA, et al. Compassion in Health Care: An Empirical Model. *J. Pain Symptom Manag* 2016; 51:193–203.
3. Sansó N, Galiana L, Oliver A, Tomás-Salvá M, Vidal-Blanco G. Predicting Professional Quality of Life and Life Satisfaction in Spanish Nurses: A Cross-Sectional Study. *Int J Environ Res Public Health* 2020;18;17(12):4366.
4. Pérez-Belmonte S, Galiana L, Fernández I, Vidal-Blanco G, Sansó N. The Personal Wellbeing Index in Spanish palliative care professionals: a cross-sectional study of wellbeing. *Front Psychol* 2021 12: 672792.
5. Larkin PJ. *Compassion: The Essence of Palliative and End-of-Life Care*; Oxford University Press: New York, NY, USA, 2016.
6. Vachon MLS. Targeted intervention for family and professional caregivers: Attachment, empathy, and compassion. *Palliat Med* 2016; 30:101–103.
7. Alharbi J, Jackson D, Usher K. The potential for COVID-19 to contribute to compassion fatigue in critical care nurses. *J Clin Nurs* 2020;29(15-16):2762-2764.
8. Hofmeyer A, Taylor R, Kennedy K. Fostering compassion and reducing burnout: How can health system leaders respond in the Covid-19 pandemic and beyond? *Nurse Educ Today* 2020;94:104502.
9. Renzi S, Fallanca F, Zangrillo A, Tresoldi M, Landoni G, et al. Caring with compassion during COVID-19. *Palliat Support Care* 2020; Aug;18(4):403-404.
10. Kearney MK, Weininger RB, Vachon MLS, Harrison RL, Mount BM. Self-care of Physicians Caring for Patients at the End of Life “Being Connected . . . A Key to My Survival.”. *JAMA J. Am. Med. Assoc* 2009;301:1155–1164.
11. Samson T, Shvartzman P. Association between level of exposure to death and dying and professional quality of life among palliative care workers. *Palliat Support Care* 2018;16:442–451.

12. Alkema K, Linton JM, Davies R. A study of the relationship between self-care, compassion satisfaction, compassion fatigue, and burnout among hospice professionals. *J. Soc. Work End Life Palliat Care* 2008;4:101–119.
13. Aycock N, Boyle D. Interventions to manage compassion fatigue in oncology nursing. *Clin J Oncol Nurs* 2009;13:183–191.
14. Henry JD, Henry LS. The self-caring nurse. Strategies for avoiding compassion fatigue and burnout. *Okla Nurse* 2004; 49, 9.
15. Neville K, Cole DA. The Relationships Among Health Promotion Behaviors, Compassion Fatigue, Burnout, and Compassion Satisfaction in Nurses Practicing in a Community Medical Center. *JONA J Nurs. Adm* 2013; 43:348–354.
16. Hansen EM, Eklund JH, Hallé A, Bjurhager CS, Norrström E, et al. Does Feeling Empathy Lead to Compassion Fatigue or Compassion Satisfaction? The Role of Time Perspective. *J Psychol* 2018;152:630–645.
17. Cole R. Meditation in palliative care—a practical tool for self-management. *Palliat Med* 1997; 11:411–413.
18. Novack DH, Suchman AL, Clark W, Epstein RM, Najberg E, et al. Calibrating the physician. Personal awareness and effective patient care. Working Group on Promoting Physician Personal Awareness, American Academy on Physician and Patient. *JAMA* 1997;278:502–509.
19. Epstein RM. Mindful practice. *JAMA* 1999;282:833–839.
20. Hutchinson TA. (Ed.) *Whole Person Care: A New Paradigm for the 21st Century*; Springer-Verlag: New York, NY, USA, 2011.
21. Thieleman K, Cacciatore J. Witness to suffering: Mindfulness and compassion fatigue among traumatic bereavement volunteers and professionals. *Soc Work* 2014;59: 34–41.
22. Thompson I.A, Amatea ES, Thompson ES. Personal and Contextual Predictors of Mental Health Counselors' Compassion Fatigue and Burnout. *J Ment Health Couns* 2014;36:58–77.

23. Holland JM, Neimeyer RA. Reducing the risk of burnout in end-of-life care settings: The role of daily spiritual experiences and training. *Palliat Support Care* 2005;3: 173–181.
24. Mills J, Wand T, Fraser JA. On self-compassion and self-care in nursing: Selfish or essential for compassionate care? *Int J Nurs Stud* 2015;52,4:791-793.
25. Galiana L, Sansó N. A brief introduction to compassion: construct definition and measurement. In Galiana L, Sansó N (eds). *The Power of Compassion*; New York: Nova Science; 2019: 3-29.
26. Gilbert P. *The compassionate mind: A new approach to life's challenges*. London: Constable & Robinson, 2009.
27. Gilbert P. *The compassionate mind*. London: Constable & Robinson, 2010.
28. Gilbert P, Catarino F, Duarte C, Matos M, Kolts R, Stubbs J, ... Basran J. The development of compassionate engagement and action scales for self and others. *J of Compassionate Health Care* 2017; 4, 4.
29. Neff K. *Self-compassion: the proven power of being kind to yourself*. William Morrow, 2015
30. Johnson EA, O'Brien KA. Self-Compassion Soothes the Savage EGO-Threat System: Effects on Negative Affect, Shame, Rumination, and Depressive Symptoms. *J Soc Clin Psychol* 2013; 32(9): 939-963.
31. Odou N, Brinker J. (2014). Exploring the relationship between rumination, self-compassion, and mood. *Self and Identity* 2014; 13(4): 449-459.
32. Raes F. Rumination and worry as mediators of the relationship between self-compassion and depression and anxiety. *Pers Individ Dif* 2010;48(6), 757-761.
33. Krieger T, Altenstein D, Baettig I, Doerig N, Holtforth MG. Self-compassion in depression: Associations with depressive symptoms, rumination, and avoidance in depressed outpatients. *Behav Ther* 2013;44(3):501–513.
34. Leary MR, Tate EB, Adams CE, Batts, A, Hancock J. Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *J Pers Soc Psychol* 2007;92:887–904.

35. Neff KD, Hsieh YP, DeJitterat K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity* 2005;4:263–287.
36. Neff KD, Rude SS, Kirkpatrick KL. An examination of self-compassion in relation to positive psychological functioning and personality traits. *J Res Pers* 2007;41:908–916.
37. Neely ME, Schallert DL, Mohammed SS, Roberts RM, Chen Y. (2009). Selfkindness when facing stress: The role of self-compassion, goal regulation, and support in college students' well-being. *Motiv Emot* 2009;33:88-97.
38. Raab K. Mindfulness, self-compassion, and empathy among health care professionals: a review of the literature. *J Health Care Chaplain* 2014;20:95–108.
39. Gustin L, Wagner L. The butterfly effect of caring - clinical nursing teachers' understanding of self-compassion as a source to compassionate care. *Scand. J. Caring Sci* 2013;27:175-183.
40. Durkin M, Beaumont E, Hollins Martin CJ, Carson J. A pilot study exploring the relationship between self-compassion, self-judgement, self-kindness, compassion, professional quality of life and wellbeing among UK community nurses. *Nurse Educ. Today* 2016;46:109-114.
41. Sansó N, Galiana L, González B, Sarmentero J, Reynes M, et al. Differential effects of two contemplative practice-based programs for health care professionals. *Interv Psicosoc* 2019; 28,3:131-138.
42. Halifax J. The precious necessity of compassion. *J Pain Sympt Manage* 2011;41:146–152.
43. Breiddal SMF. Self-care in palliative care: A way of being. *Illn Crises Loss* 2012;20,1: 5–17.
44. Rose J, Glass N. Enhancing emotional well-being through self-care: the experiences of community health nurses in Australia. *Holistic Nurs Practice* 2008;22: 336–347.
45. Mills J, Wand T, Fraser JA. Palliative care professionals' care and compassion for self and others: a narrative review. *Int J Palliat Nurs* 2017 ;23,5:219-229.

46. Mills J, Wand T, Fraser JA. Examining self-care, self-compassion and compassion for others: a cross-sectional survey of palliative care nurses and doctors. *Int J Palliat Nurs* 2018;24,1:4-11.
47. Sansó N, Galiana L, Oliver A, Pascual A, Sinclair S, et al. Palliative Care Professionals' Inner Life: Exploring the Relationships Among Awareness, Self-Care, and Compassion Satisfaction and Fatigue, Burnout, and Coping With Death. *J Pain Symptom Manag* 2015;50:200–207.
48. Freudenberger H. Staff Burnout. *J Soc Issues* 1974;30:159-165.
49. Burton A, Burgess C, Dean S, Koutsopoulou GZ, Hugh-Jones S. How Effective are Mindfulness-Based Interventions for Reducing Stress Among Healthcare Professionals? A Systematic Review and Meta-Analysis. *Stress Health* 2017; 33(1), 3-13.
50. Gribben JL, MacLean SA, Pour T, Waldman ED, Weintraub AS. (2019). A Cross-sectional Analysis of Compassion Fatigue, Burnout, and Compassion Satisfaction in Pediatric Emergency Medicine Physicians in the United States. *Acad Emerg Med* 2019;26(7), 732–743.
51. Gribben JL, Kase SM, Waldman ED, Weintraub AS. (2019). A Cross-Sectional Analysis of Compassion Fatigue, Burnout, and Compassion Satisfaction in Pediatric Critical Care Physicians in the United States. *Pediatr Crit Care Med* 2019;20(3): 213–222.
52. Figley CR. Compassion fatigue as secondary traumatic stress disorder: an overview. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 1-20). New York: Brunner-Routledge, 1995.
53. Figley CR. Compassion fatigue: Toward a new understanding of the costs of caring. In: *Secondary Traumatic Stress: Self-Care Issues for Clinicians, Researchers, and Educators* (pp. 3-2). Second Edition. Baltimore: The Sidran Press, 1999.
54. Stamm BH. The Concise ProQOL Manual. Available online: <https://img1.wsimg.com/blobby/go/dfc1e1a0-a1db-4456-9391->

[18746725179b/downloads/ProQOL%20Manual.pdf?ver=1622839353725](https://www.proqol.com/downloads/ProQOL%20Manual.pdf?ver=1622839353725). Accessed November 25, 2020.

55. Figley CR. Compassion fatigue: Psychotherapists' chronic lack of self care. *J Clin Psychol* 2002;58:1433–1441.
56. Sabo BM. Compassion fatigue and nursing work: can we accurately capture the consequences of caring work? *Int J Nurs Pract* 2006;12(3), 136-142.
57. Figley CR. Compassion fatigue as secondary traumatic stress disorder: an overview. In Figley CR (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. Brunner-Routledge, 1995: 1-20.
58. Coetzee SK, Klopper HC. (2010). Compassion fatigue within nursing practice: a concept analysis. *Nurs Health Sci* 2010;12:235-243.
59. Stamm BH. Measuring compassion satisfaction as well as fatigue: Developmental history of the compassion satisfaction and fatigue test. In: *Treating Compassion Fatigue*. Figley CR (Ed). New York, NY, Routledge, 2002: 107-111.
60. Stamm BH. Helping the helpers: compassion satisfaction and compassion fatigue in self-care, management, and policy. In A. D. Kirkwood & B. H. Stamm (Eds.), *Resources for community suicide prevention [CD]*. Idaho State University, 2012.
61. Roney LN, Acri MC. The Cost of Caring: An Exploration of Compassion Fatigue, Compassion Satisfaction, and Job Satisfaction in Pediatric Nurses. *J Pediatr Nurs*. 2018 May-Jun;40:74-80.
62. Oliver A, Galiana L, Simone G, Tomás JM, Arena F, Linzitto J, Grance G, Sansó N. Palliative Care Professionals' Inner Lives: Cross-Cultural Application of the Awareness Model of Self-Care. *Healthc* 2021 Jan 15;9(1):81.
63. Von Elm, E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP. STROBE Initiative. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. *J Clin Epidemiol* 2008;61,4:344-349.

64. Galiana L, Oliver A, Sansó N, Benito E. Validation of a new instrument for self-care in Spanish palliative care professionals nationwide. *Span J Psychol* 2015;18,e67:1-9.
65. Cebolla A, Luciano JV, Piva MP, Navarro-Gil M, Garcia Campayo J. Psychometric properties of the Spanish version of the mindful attention awareness scale (MAAS) in patients with fibromyalgia. *Health Qual Life Outcomes* 2013;11:6.
66. Galiana L, Oliver A, Sansó N, Sancerni MD, Tomás J M. Mindful attention awareness in Spanish palliative care professionals: Psychometric study with IRT and CFA models. *Eur J Psychol Assess* 2017;33,1:14–21.
67. Galiana L, Oliver A, De Simone G, Linzitto JP, Benito E, Sansó N. A Brief Measure for the Assessment of Competence in Coping With Death: The Coping With Death Scale Short Version. *J Pain Symptom Manage* 2019 Feb;57(2):209-215.
68. Raes F, Pommier E, Neff KD, Van Gucht D. Construction and factorial validation of a short form of the Self-Compassion Scale. *ISO4 Estándar. Clin Psychol Psychother* 2011;18:250-255.
69. Garcia-Campayo J, Navarro-Gil M, Andrés E, Montero-Marin J, López-Artal L, Demarzo MM. Validation of the Spanish versions of the long (26 items) and short (12 items) forms of the Self-Compassion Scale (SCS). *Health Qual Life Outcomes* 2014 Dec;12(1):1-9.
70. Galiana L, Arena F, Oliver A, Sansó N, Benito E. Compassion Satisfaction, Compassion Fatigue, and Burnout in Spain and Brazil: ProQOL Validation and Cross-cultural Diagnosis. *J Pain Symptom Manage*. 2017 Mar;53(3):598-604.
71. Byrne BM. *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. Routledge, 2013
72. Hu LT, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct Equ Modeling* 1999 Jan 1;6,1:1-55.
73. Kenny DA, Kaniskan B, McCoach DB. The performance of RMSEA in models with small degrees of freedom. *Sociol Methods Res* 2015 Aug;44,3:486-507.
74. IBM Corp. *IBM SPSS Statistics for Windows, Version 24.0*. IBM Corp, 2016.

75. Muthén L, Muthén B. Mplus user's guide. 8th ed. Authors, 2017.
76. Boomsma A. Robustness of LISREL against small sample sizes in factor analysis models. In: Joreskog KG, Wold H, editors. Systems under indirection observation: Causality, structure, prediction (Part I) Amsterdam, Netherlands: North Holland, 1982:149–173.
77. Boomsma A. Nonconvergence, improper solutions, and starting values in LISREL maximum likelihood estimation. *Psychometrika* 1985;50:229–242.
78. Nunnally JC. *Psychometric theory*. New York, NY: McGraw-Hill, 1967.
79. Kearney MK, Weininger RB. Whole person self-care: Self-care from the inside out. In *Whole Person Care*; Hutchinson TA, Ed.; Springer: New York, NY, USA, 2011.
80. Pöyhiä R, Jaatinen A, Niemi-Murola L, Mtega A, Mpumilwa G, Mmbando P. Palliative Care Volunteers Have High Workload but No Burnout: A Questionnaire Survey from Tanzania. *J Palliat Med*. 2019 May;22(5):493-499.
81. Phillips C. Relationships between workload perception, burnout, and intent to leave among medical-surgical nurses. *Int J Evid Based Healthc* 2020 Jun;18(2):265-273.
82. Welp A, Rothen HU, Massarotto P, Manser T. Teamwork and clinician burnout in Swiss intensive care: the predictive role of workload, and demographic and unit characteristics. *Swiss Med Wkly*. 2019 Mar 24;149:w20033.
83. Ruiz-Fernández MD, Ramos-Pichardo JD, Ibáñez-Masero O, Carmona-Rega MI, Sánchez-Ruiz MJ, Ortega-Galán AM. Professional quality of life, self-compassion, resilience, and empathy in healthcare professionals during COVID-19 crisis in Spain. *Res Nurs Health* 2021;10.1002/nur.22158. Advance online publication. <https://doi.org/10.1002/nur.22158>
84. Sanchez-Reilly S, Morrison LJ, Carey E, Bernacki R, O'Neill L, et al. Caring for oneself to care for others: Physicians and their self-care. *J Support Oncol* 2013;11:75–81.
85. Radwany S, Hassler D, Robinson N, et al. Poetry as self-care and palliative care. *J Palliat Med* 2012;15:1394–1395.

86. Neville K, Cole DA. The Relationships Among Health Promotion Behaviors, Compassion Fatigue, Burnout, and Compassion Satisfaction in Nurses Practicing in a Community Medical Center. *JONA J Nurs Adm* 2013;43:348–354.
87. Sorenson C, Bolick B, Wright K, Hamilton R. Understanding Compassion Fatigue in Healthcare Providers: A Review of Current Literature. *J Nurs Sch* 2016;48:456–465.
88. Katz RS, Genevay B. Our patients, our families, ourselves: The impact of the professional's emotional responses on end-of-life care. *Am Behav Sci* 2002;46:327–39.
89. Edmonds KP, Yeung HN, Onderdonk C, et al. Clinical supervision in the palliative care team setting: A concrete approach to team wellness. *J Palliat Med* 2015;18:274–277.
90. Mesquita Garcia AC, Domingues Silva B, Oliveira da Silva LC, Mills J. (2021). Self-compassion In Hospice and Palliative Care: A Systematic Integrative Review. *J Hosp Palliat Nurs* 2021;23(2), 145–154.
91. Dev V, Fernando III AT, Lim AG, Consedine NS. Does self-compassion mitigate the relationship between burnout and barriers to compassion? A cross-sectional quantitative study of 799 nurses. *International Int J Nurs Stud* 2018;81:81-88.
92. Galiana L, Sansó N, Vidal-Blanco G, Badenes-Ribera L. The paths of compassionate care: An approach for end-of-life professionals. In L. Galiana & N. Sansó (Eds.), *Psychology research progress. The power of compassion*. Nova Science Publishers, 2019: 297-316.
93. Koh MY, Chong PH, Neo PS, Ong YJ, Yong WC, et al. Burnout, psychological morbidity and use of coping mechanisms among palliative care practitioners: A multi-centre cross-sectional study. *Palliat Med* 2015 Jul;29,7:633-642.
94. Lizano EL. Examining the Impact of Job Burnout on the Health and Well-Being of Human Service Workers: A Systematic Review and Synthesis. *Hum Serv Organ Manag Leadersh Gov* 2015;39:167–181.
95. Pipe TB, Bortz JJ, Dueck A, Pendergast D, Buchda V, et al. Nurse Leader Mindfulness Meditation Program for Stress Management. *JONA J Nurs Adm* 2009;39:130–137.

96. Salyers MP, Bonfils KA, Luther L, Firmin RL, White DA, et al. The Relationship Between Professional Burnout and Quality and Safety in Healthcare: A Meta-Analysis. *J Gen Intern Med* 2016;32:475–482.
97. Block SD. Psychological considerations, growth, and transcendence at the end of life: the art of the possible. *JAMA* 2001;285,22:2898-2905.
98. Kline RB. Principles and practice of structural equation modeling. Guilford publications, 2015

Figure 1. Hypothesized structural equation model.

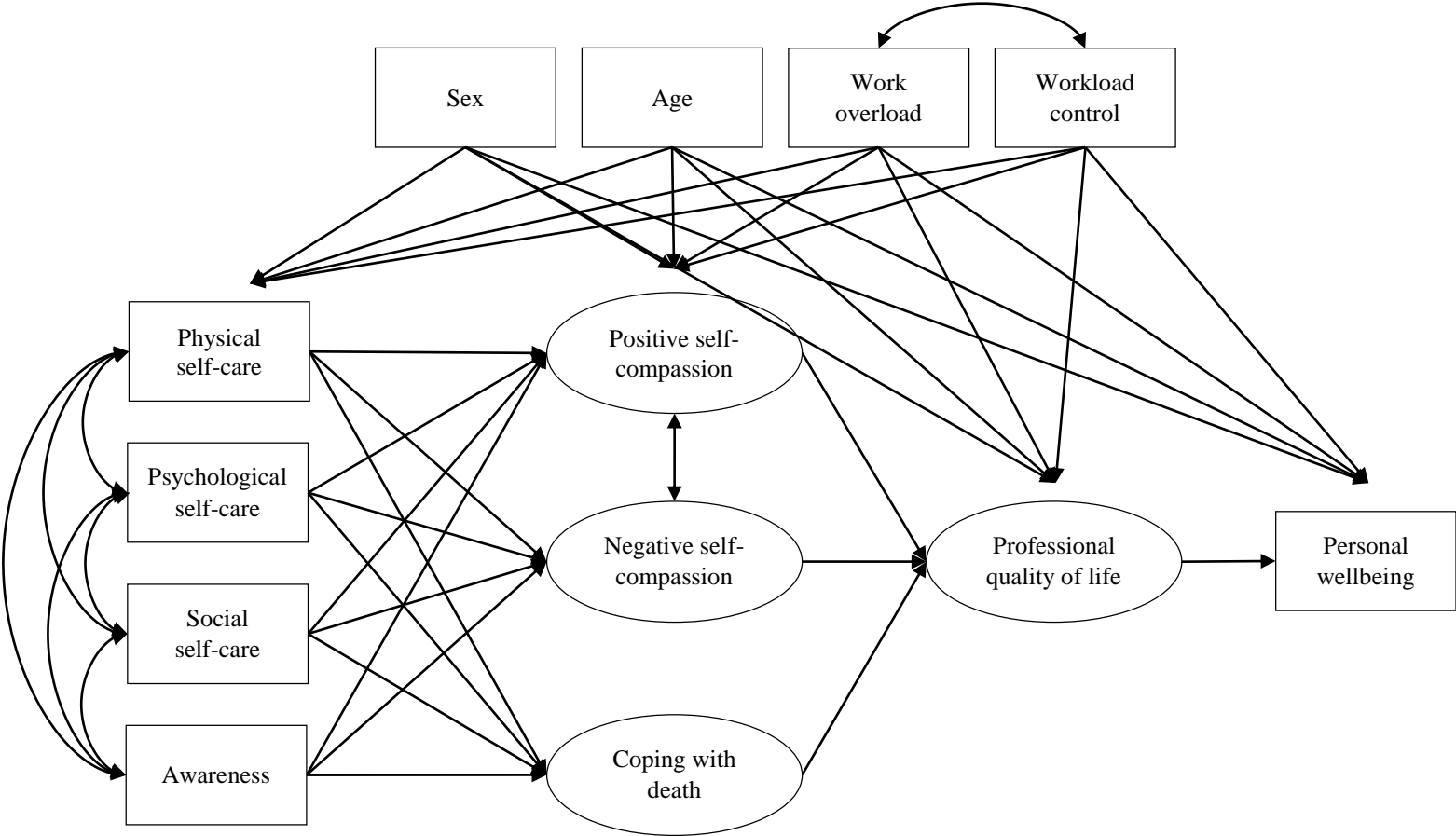
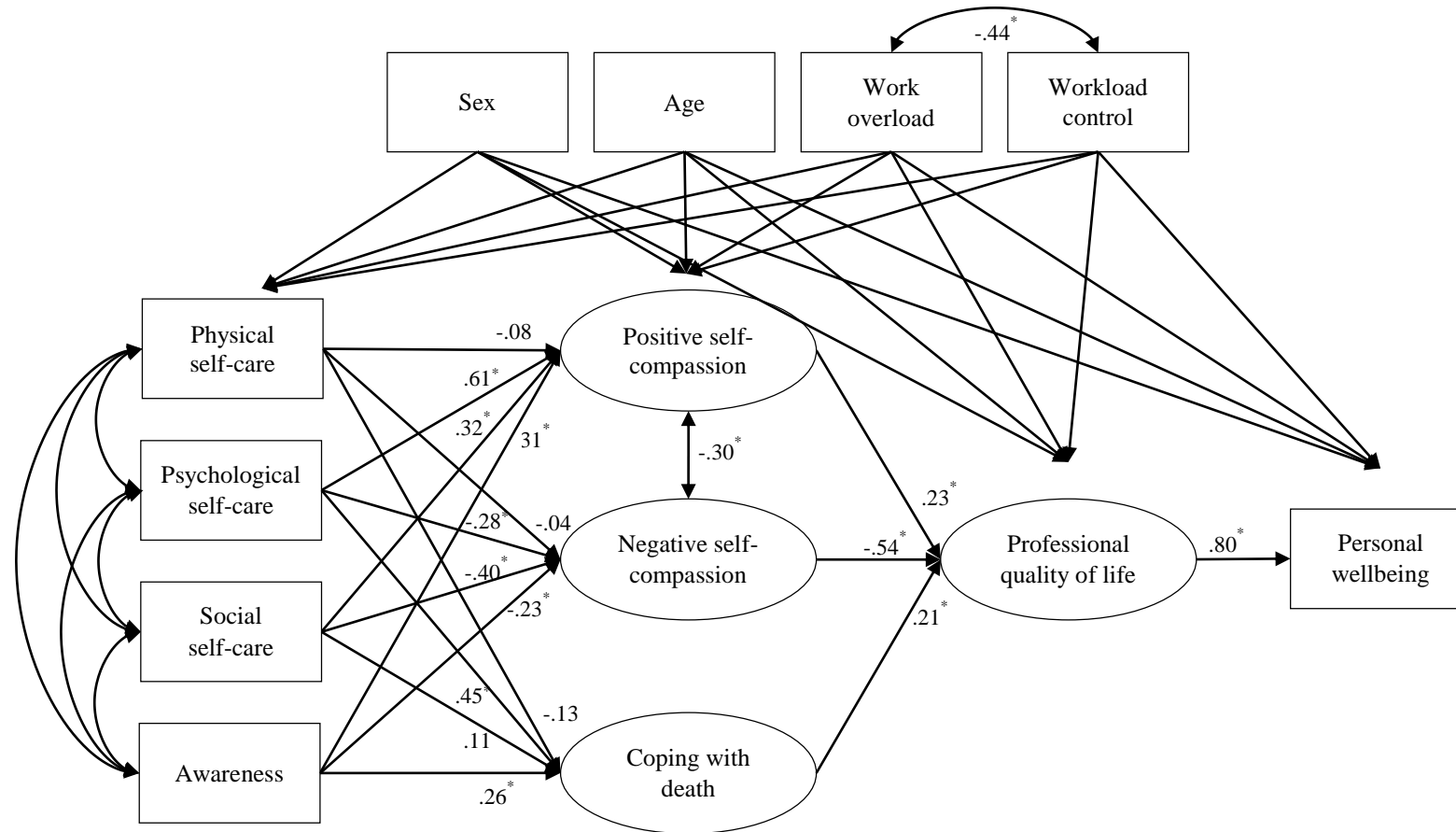


Figure 2. Standardized parameter estimates of the structural equation model.



Notes: $^* p < .050$. Factor loadings are shown in Table 4, and effects of the control variables can be consulted in Table 5. For the sake of clarity, standard errors are not shown.

Table 1. Sample characteristics

Variables	Categories	N	%
Sex	Men	66	22.3
	Women	229	77.4
	Missing	1	0.3
Studies	Undergraduate	20	6.7
	Graduate	249	84.2
	Postgraduate	26	8.8
	Missing	1	0.3
Marital status	Single/divorced/widowed	102	34.5
	Married/living with a couple	192	64.9
	Missing	2	0.6
Profession	Nurse	129	43.6
	Physician	93	31.4
	Nursing assistant	13	4.4
	Psychologist	25	8.4
	Social worker	17	5.7
	Others	15	5.1
	Missing	4	1.4

Table 2. Reliability estimates and descriptive statistics of the variables included in the model

Variables	Ω	Mean	SD	Min.	Max.
Physical self-care	.814	3.72	1.00	1.00	5.00
Psychological self-care	.907	3.05	1.14	1.00	5.00
Social self-care	.724	4.13	0.72	1.00	5.00
Awareness	.887	4.00	0.82	2.00	5.00
Coping with death	.913	4.05	0.59	2.11	5.00
Positive self-compassion: self-kindness	--	3.28	0.90	1.00	5.00
Positive self-compassion: mindfulness	--	3.70	0.79	1.00	5.00
Positive self-compassion: common humanity	--	3.23	0.90	1.00	5.00
Negative self-compassion: over-identification	--	2.96	0.99	1.00	5.00
Negative self-compassion: isolation	--	2.62	1.03	1.00	5.00
Negative self-compassion: self-judgement	--	2.83	0.98	1.00	5.00
Positive self-compassion (total)	.823	3.41	0.71	1.17	4.83
Negative self-compassion (total)	.863	2.81	0.85	1.00	5.00
Professional quality of life: compassion satisfaction	.913	42.56	5.09	24.00	50.00
Professional quality of life: compassion fatigue	.870	20.55	5.12	11.00	35.00
Professional quality of life: burnout	.805	23.17	5.15	10.00	39.00
Personal wellbeing	.923	3.95	0.57	1.38	5.00

Table 3. Correlations among the variables included in the model

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 Physical self-care	1													
2 Psychological self-care	.444**	1												
3 Social self-care	.308**	.218**	1											
4 Awareness	.275**	.192**	.303**	1										
5 Coping with death	.209**	.338**	.181**	.278**	1									
6 Positive self-compassion: self-kindness	.439**	.466**	.344**	.332**	.311**	1								
7 Positive self-compassion: mindfulness	.208**	.279**	.302**	.271**	.263**	.617**	1							
8 Positive self-compassion: common humanity	.282**	.269**	.289**	.232**	.282**	.496**	.460**	1						
9 Negative self-compassion: over-identification	-.219**	-.197**	-.292**	-.237**	-.150*	-.399**	-.388**	-.227**	1					
10 Negative self-compassion: isolation	-.302**	-.275**	-.447**	-.246**	-.159*	-.385**	-.366**	-.246**	.645**	1				
11 Negative self-compassion: self-judgement	-.211**	-.275**	-.217**	-.232**	-.213**	-.398**	-.335**	-.288**	.605**	.502**	1			
12 Professional quality of life: compassion satisfaction	.170**	.242**	.405**	.323**	.249**	.325**	.236**	.169**	-.247**	-.354**	-.146*	1		
13 Professional quality of life: compassion fatigue	-.220**	-.198**	-.254**	-.328**	-.300**	-.296**	-.309**	-.164**	.471**	.471**	.300**	-.267**	1	
14 Professional quality of life: burnout	-.345**	-.445**	-.484**	-.471**	-.335**	-.456**	-.308**	-.294**	.386**	.446**	.331**	-.587**	.570**	1
15 Personal wellbeing	.370**	.404**	.509**	.248**	.295**	.493**	.366**	.397**	-.402**	-.498**	-.353**	.467**	-.338**	-.565**

Notes: The values presented in the Table refer to Pearson correlation coefficients (r). * $p < .050$; ** $p < .010$.

Table 4. Factor loadings of the measurement part of the model

Coping with death		Positive self-compassion		Negative self-compassion		Professional quality of life	
Item 1	.576	SK	.885	OI	.722	CS	.579
Item 2	.654	M	.682	I	.804	CF	-.817
Item 3	.753	CH	.586	SJ	.647	BO	-.606
Item 4	.676						
Item 5	.663						
Item 6	.818						
Item 7	.885						
Item 8	.786						
Item 9	.773						

Notes: The values presented in the Table refer to factor loadings coefficients (λ). SK = self-kindness; M = mindfulness; CH = common humanity; OI = over-identification; I = isolation; SJ = self-judgement; CS = compassion satisfaction; CF = compassion fatigue; BO = burnout. All factor loadings were statistically significant ($p < .001$).

Table 5. Effects of the control variables (sex, age, workload volume and workload control) included in the structural equation model

Variables	Sex	Age	Work overload	Workload control
Physical self-care	.084	.045	.053	.261**
Psychological self-care	-.137*	.186*	.053	.308**
Social self-care	-.056	.086	-.051	.208**
Awareness	.073	.213**	-.021	.304**
Positive self-compassion	.191**	-.103	.006	-.071
Negative self-compassion	-.087	.088	-.025	.093
Coping with death	.136*	.005	.074	.001
Professional quality of life	-.040	.066	-.135*	.167**
Personal wellbeing	-.059	-.050	.011	-.091

Notes: * $p < .050$; ** $p < .010$.